APPENDICES
CURRENT PROGRAMS AND PROGRAMS AGREED BY THE PARTIES TO DEVELOP AND LAUNCH

APPENDIX A
2+2 A.S. IN CHEMISTRY AT ATLANTIC CAPE TO B.S. IN BIOCHEMISTRY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**CHEM 111 General Chemistry II (4CR)** [CHEM 06101 Chemistry II (4CR) Lab Science]
2	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
3	**MATH 155 Calculus I (4CR)** [MATH 01130 Calculus I (4CR) Quantitative Literacy]	**MATH 156 Calculus II (4CR)** [MATH 01131 Calculus II (4CR)]
4	**Program Elective (4CR)**[1]	**GE Social Science Course (3CR)** [Global Literacy (3CR)][2]
5		**GE Humanities (3CR)** [Humanistic Literacy (3CR)][3]
	15 Total Semester Credits [15 Total Semester Credits]	**17 Total Semester Credits** [17 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**CHEM 211 Organic Chemistry II (4CR)** [CHEM 07201 Organic Chemistry II (4CR)]
2	**PHYS 225 General Physics I (4CR)** [PHYS 00220 Introductory Mechanics (4CR), Scientific Literacy, Lab Science]	**PHYS 226 Intro Electricity/Magnetism (4CR)** [PHYS 00222 Intro Electricity/Magnetism (4CR)]
3	**COMM 120 Public Speaking (3CR)** [CMS 04205 Public Speaking (3CR) Communicative Literacy]	**Any Gen Ed Course (3CR)** [Artistic Literacy (3CR)][4]
4	**Program Elective (3-4CR)**[1] ***RECOMMENDED:*** **MATH 255 Calculus III (4CR)** [MATH 01230 Calculus III (4CR)]	**If Technological Competency not fulfilled**[2]**, CISM 125 OR CISM 132 OR Any Gen Ed Course (3CR)**

		[CS 01076 GE Computer Science Elective OR INTR 99070 Free Elective (3CR)]
	14-15 Total Semester Credits [14-15 Total Semester Credits]	**14 Total Semester Credits** [14 Total Semester Credits]
	ATLANTIC CAPE **60-61 TOTAL PROGRAM CREDITS**	**ROWAN** **60-61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	CHEM 07348 Biochemistry (4CR)	Advanced Biochemistry Chemistry Lecture CHEM 07407 (3CR)
2	CHEM 05440 Research I (3CR)	Advanced Biochemistry Chemistry Lab CHEM 07409 (2CR)
3	Biochemistry Program Restricted Elective #1 (3CR)	Biochemistry Program Restricted Elective #2 (3CR)
4	Chemistry Program Restricted Elective #1 (3CR)	INTR 06202 Nature of Science OR PHIL 09261 Philosophical Perspectives on Science – Writing Intensive (3CR)
5	If Needed, HUML Humanistic/GLBL Globalistic/ARTL Artistic Literacy OR Free Elective (3CR)	If Needed, HUML/GLBL/ARTL Literacy OR Free Elective (3CR)
	16 Total Semester Credits	14 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	Chemistry Program Restricted Elective #2 (3CR)	Chemistry Program Restricted Elective #3 (3CR)
2	CHEM 08305 Biophysical Chemistry (3CR)	If needed, LIT Literature OR Free Elective (3CR)
3	If Needed, HUML Humanistic/GLBL Globalistic/ARTL Artistic Literacy OR Free Elective (3CR)	Free Elective (3CR)
4	CHEM 05450 Senior Seminar (1CR)	Free Elective (3CR)
5	Free Elective (3CR)	Free Elective (3CR)
6	Free Elective (1-2CR)	
	14-15 Total Semester Credits	15 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120-121**

1. <u>ATLANTIC CAPE A.S. IN CHEMISTRY PROGRAM ELECTIVES:</u>
   BIOL 104 [BIOL 01077] (3CR); BIOL 109 [BIOL 01100] (4CR); BIOL 110 [BIOL 01101] (4CR); CISM 135 [CS 04103] (4CR); MATH 152 [MATH 01210 + INTR 99070] (4CR); MATH 255 [MATH 01230] (4CR); PHIL 101 [PHIL 09110] (3CR); PHYS 226 [PHYS 00222] (4CR)
2. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Global Literacy requirement.
3. ECO 110 [ECON 04101]; ENGL 104 [ENGL 02123]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; GOVT 110 [POSC 07110]; HIST 101 [HIST 05100]; HIST 102 [HIST 05101]; HIST 103 [HIST 05150]; HIST 104 [HIST 05151]; PHIL 102 [PHIL

09120]; PHIL 110 [PHIL 09150]; PHIL 115 [PHIL 09120]; PSYC 101 [PSY 01107]; SOCL 101 [SOC 08120] fulfill the Rowan HUML Humanistic Literacy requirement.

4. ARTS 103 [ARHS 03130]; MUSC 100 [MUSG 06109] fulfill the Rowan ARTL Artistic Literacy requirement.
5. The Technological Competency Requirement is fulfilled with CISM 125 OR CISM 132, which may be taken as a Gen Ed Elective, testing or reviewed department portfolio.

APPENDIX B
2+2 A.S. IN BIOMEDICAL SCIENCE AT ATLANTIC CAPE TO B.S. IN BIOCHEMISTRY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**BIOL 109 General Biology I (4CR)** [BIOL 01100 Biology I (4CR)]	**BIOL 110 General Biology II (4CR)** [BIOL 01101 Biology II (4CR)]
2	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**CHEM 111 General Chemistry II (4CR)** [CHEM 06101 Chemistry II (4CR) Lab Science]
3	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
4	**MATH 155 OR MATH 220 (4CR)** [MATH 01130 OR STAT 02260 (3CR) + INTR 99070 (1CR) Quantitative Literacy]	**ARTS 103 OR MUSC 100 (3CR)** [ARHS 03130 OR MUSG 06109 (3CR) Artistic Literacy]
5		**Program Elective (3CR)**[1]
	15 Total Semester Credits [15 Total Semester Credits]	**17 Total Semester Credits** [17 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**BIOL 220 Human Anatomy & Physiology I (4CR)** [BIOL 10210 Human Anatomy & Physiology I (4CR) Lab Science]	**BIOL 250 Microbiology (4CR)** [BIOL 11330 Microbiology (4CR) Lab Science]
2	**PHIL 110 Introduction to Ethics (3CR)** [PHIL 09150 Introduction to Ethics (3CR) Humanistic Literacy, Broad-Based Literature]	**COMM 120 Introduction to Public Speaking (3CR)** [CMS 04205 Public Speaking (3CR) Communicative Literacy]
3	**BIOL 205 Genetics (4CR)** [MCB 01101 Fnds in Bio for Biomedical Science I (4CR)] *RU Program Restricted Elective #1*	**PSYC 101 General Psychology (3CR)** [PSY 01107 Essentials of Psychology (3CR) Humanistic Literacy]
4	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**CHEM 211 Organic Chemistry II (4CR)** [CHEM 07201 Organic Chemistry II (4CR)]

	15 Total Semester Credits [15 Total Semester Credits]	**14 Total Semester Credits** [14 Total Semester Credits]
	ATLANTIC CAPE **61 TOTAL PROGRAM CREDITS**	**ROWAN** **61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	CHEM 07348 Biochemistry (4CR)	Advanced Biochemistry Chemistry Lecture CHEM 07407 (3CR)
2	CHEM 05440 Research I (3CR)	Advanced Biochemistry Chemistry Lab CHEM 07409 (2CR)
3	Biochemistry Program Restricted Elective #1 (3CR)	Biochemistry Program Restricted Elective #2 (3CR)
4	Any GLBL Globalistic Literacy Elective (3CR)	INTR 06202 Nature of Science OR PHIL 09261 Philosophical Perspectives on Science – Writing Intensive (3CR)
5	Free Elective (3CR)	Free Elective (3CR)
	16 Total Semester Credits	14 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	Chemistry Program Restricted Elective #1 OR Free Elective (3CR)	CHEM 05450 Senior Seminar (1CR)
2	CHEM 08305 Biophysical Chemistry (3CR)	Chemistry Program Restricted Elective #2 (3CR)
3	MCB 01102 Foundations in Biology for Biomedical Sciences II (4CR)	Chemistry Program Restricted Elective #3 (3CR)
4	Free Elective (3CR)	Free Elective (3CR)
5	Free Elective (3CR)	Free Elective (3CR)
	16 Total Semester Credits	13 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120**

1. ATLANTIC CAPE A.S. IN BIOMEDICAL SCIENCE PROGRAM ELECTIVES:
   BIOL 104 [BIOL 01077] (3CR); BIOL 205 [MCB 01101] (4CR); BIOL 221 [BIOL 01101] (4CR); CHEM 210 [CHEM 07200] (4CR); CHEM 211 [CHEM 07201] (4CR); CISM 135 [CS 04103] (4CR); MATH 155 [MATH 01130 Quantitative Literacy] (4CR); MATH 156 [MATH 01131] (4CR); MATH 220 [STAT 02260 + INTR 99070] (4CR); PHIL 101 [PHIL 09110] (3CR); PHYS 225 [PHYS 00220 Scientific Literacy, Lab Science] (4CR); PHYS 226 [PHYS 00222] (4CR)

APPENDIX C
2+2 A.S. IN ENVIRONMENTAL SCIENCE AT ATLANTIC CAPE TO B.S. IN BIOCHEMISTRY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**BIOL 109 General Biology I (4CR)** [BIOL 01100 Biology I (4CR)]	**BIOL 110 General Biology II (4CR)** [BIOL 01101 Biology II (4CR)]
2	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**CHEM 111 General Chemistry II (4CR)** [CHEM 06101 Chemistry II (4CR) Lab Science]
3	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
4	**ENVL 100 Introduction to Environmental Science (4CR)** [EVSC 01121 Global Environmental Change (3CR) + INTR 99070 Free Elective (1CR)]	**MATH 155 OR MATH 220 (4CR)** MATH 01130 (4CR) OR STAT 02260 (3CR) + INTR 99070 (1CR) Quantitative Literacy]
5		**ENVL 140 Environmental Field & Lab Techniques (1CR)** [GEOG 06075 GE Geography Elective (1CR)]
	15 Total Semester Credits [15 Total Semester Credits]	**16 Total Semester Credits** [16 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**ESCI 100 Earth Science (4CR)** [GEOG 16130 Earth Sciences Lab I (4CR)]	**ENVL 225 Environmental Science Research Capstone (2CR)** [INTR 99070 Free Elective (2CR)]
2	**ENVL 205 Ecology (4CR)** [BIOL 01204 Intro to Ecology (4CR)]	**GE Humanities Course (3CR)** [Humanistic Literacy (3CR)][1]
3	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**CHEM 211 Organic Chemistry II (4CR)** [CHEM 07201 Organic Chemistry II (4CR)]
4	**ENVL 120 Weather and Climate (4CR)** [INTR 99070 Free Elective (4CR)]	**If Technological Competency not fulfilled[2], CISM 125 OR CISM 132 OR Any Gen Ed Course (3CR)** [CS 01076 OR INTR 99070 (3CR)]

5		**GE Social Science Course (3CR)** [Global Literacy (3CR)][3]
	16 Total Semester Credits [16 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	ATLANTIC CAPE **62 TOTAL PROGRAM CREDITS**	**ROWAN** **62 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	CHEM 07348 Biochemistry (4CR)	Advanced Biochemistry Chemistry Lecture CHEM 07407 (3CR)
2	CHEM 05440 Research I (3CR)	Advanced Biochemistry Chemistry Lab CHEM 07409 (2CR)
3	Biochemistry Program Restricted Elective #1 (3CR)	Biochemistry Program Restricted Elective #2 (3CR)
4	If needed, ARTL Artistic Literacy[4] OR Free Elective (3CR)	INTR 06202 Nature of Science OR PHIL 09261 Philosophical Perspectives on Science – Writing Intensive (3CR)
5	Free Elective (3CR)	Free Elective (3CR)
	16 Total Semester Credits	14 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	Chemistry Program Restricted Elective #1 (3CR)	Chemistry Program Restricted Elective #3 (3CR)
2	Chemistry Program Restricted Elective #2 (3CR)	If needed, LIT Literature Elective OR Free Elective (3CR)
3	CHEM 08305 Biophysical Chemistry (3CR)	CHEM 05450 Senior Seminar (1CR)
4	Free Elective (3CR)	Free Elective (3CR)
5	Free Elective (3CR)	Free Elective (3CR)
	15 Total Semester Credits	13 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120**

1. ECO 110 [ECON 04101]; ENGL 104 [ENGL 02123]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; GOVT 110 [POSC 07110]; HIST 101 [HIST 05100]; HIST 102 [HIST 05101]; HIST 103 [HIST 05150]; HIST 104 [HIST 05151]; PHIL 102 [PHIL 09120]; PHIL 110 [PHIL 09150]; PHIL 115 [PHIL 09120]; PSYC 101 [PSY 01107]; SOCL 101 [SOC 08120] fulfill the Rowan HUML Humanistic Literacy requirement.
2. The Technological Competency Requirement is fulfilled with CISM 125 OR CISM 132, which may be taken as a Gen Ed Elective, testing or reviewed department portfolio.
3. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Global Literacy requirement.
4. ARTS 103 [ARHS 03130]; MUSC 100 [MUSG 06109] fulfill the Rowan ARTL Artistic Literacy requirement.
5. ENGL 201 [ENGL 02105]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; ENGL 213 [ENGL 02105]; ENGL 214 [ENGL 02107]; ENGL 216 [ENGL 02151]; PHIL 110 [PHIL 09250] fulfill the Rowan LIT Broad-Based Literature requirement.

APPENDIX D
2+2 A.S. IN BIOLOGY AT ATLANTIC CAPE TO
B.S. IN BIOCHEMISTRY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**BIOL 109 General Biology I (4CR)** [BIOL 01100 Biology I (4CR)]	**BIOL 110 General Biology II (4CR)** [BIOL 01101 Biology II (4CR)]
2	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**CHEM 111 General Chemistry II (4CR)** [CHEM 06101 Chemistry II (4CR) Lab Science]
3	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
4	**MATH 155 Calculus I (4CR)** [MATH 01130 Calculus I Quantitative Literacy]	**MATH 156 Calculus II (4CR)** [MATH 01131 Calculus II (4CR)]
	15 Total Semester Credits [15 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**ARTS 103 OR MUSC 100 (3CR)** [ARHS 03130 OR MUSG 06109 (3CR) Artistic Literacy]
2	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**GE Social Science Course (3CR)** [Global Literacy (3CR)][2]
3	**PHYS 226 Intro Electricity/Magnetism (4CR)** [PHYS 00222 Intro Electricity/Magnetism (4CR)]	**CHEM 211 Organic Chemistry II (4CR)** [CHEM 07201 Organic Chemistry II (4CR)]
4	**Program Elective (3CR)[1]**	**If Technological Competency not fulfilled[3], CISM 125 OR CISM 132 OR Any Gen Ed Course (3CR)** [CS 01076 OR INTR (3CR)]
5		**GE Humanities Course (3CR)** [Humanistic Literacy (3CR)][4]
	15 Total Semester Credits [15 Total Semester Credits]	**16 Total Semester Credits** [16 Total Semester Credits]
	ATLANTIC CAPE 61 TOTAL PROGRAM CREDITS	**ROWAN 61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan

1	CHEM 07348 Biochemistry (4CR)	Advanced Biochemistry Chemistry Lecture CHEM 07407 (3CR)
2	CHEM 05440 Research I (3CR)	Advanced Biochemistry Chemistry Lab CHEM 07409 (2CR)
3	Biochemistry Program Restricted Elective #1 (3CR)	Biochemistry Program Restricted Elective #2 (3CR)
4	If needed, LIT Literature Elective[5] OR Free Elective (3CR)	INTR 06202 Nature of Science OR PHIL 09261 Philosophical Perspectives on Science – Writing Intensive (3CR)
5	Free Elective (3CR)	Free Elective (3CR)
	16 Total Semester Credits	14 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	Chemistry Program Restricted Elective #1 (3CR)	Chemistry Program Restricted Elective #3 (3CR)
2	Chemistry Program Restricted Elective #2 (3CR)	CHEM 05450 Senior Seminar (1CR)
3	Free Elective (3CR)	If Needed, HUML Humanistic Literacy OR GLBL Globalistic Literacy OR Free Elective (3CR)
4	CHEM 08305 Biophysical Chemistry (3CR)	Free Elective (3CR)
5	Free Elective (3CR)	Free Elective (3CR)
6		Free Elective (1CR)
	15 Total Semester Credits	14 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120**

1. ATLANTIC CAPE A.S. IN BIOLOGY PROGRAM ELECTIVES:
   BIOL 104 [BIOL 01077] (3CR); BIOL 205 [BIOL 01106 OR MCB 01101] (4CR); BIOL 250 [BIOL 11330] (4CR); CHEM 211 [CHEM 07201] (4CR); ENVL 205 (4CR) [BIOL 01204] (4CR); MATH 152 [MATH 01210 + INTR 99070] (4CR); MATH 156 [MATH 01131] (4CR); MATH 255 [MATH 01230] (4CR); PHIL 101 [PHIL 09110] (3CR); PHYS 125 [PHYS 00210] (4CR); PHYS 225 [PHYS 00220] (4CR); PHYS 126 [PHYS 00211] (4CR); PHYS 226 [PHYS 00222] (4CR)
2. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Global Literacy requirement.
3. The Technological Competency Requirement is fulfilled with CISM 125 OR CISM 132, which may be taken as a Gen Ed Elective, testing or reviewed department portfolio.
4. ECO 110 [ECON 04101]; ENGL 104 [ENGL 02123]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; GOVT 110 [POSC 07110]; HIST 101 [HIST 05100]; HIST 102 [HIST 05101]; HIST 103 [HIST 05150]; HIST 104 [HIST 05151]; PHIL 102 [PHIL 09120]; PHIL 110 [PHIL 09150]; PHIL 115 [PHIL 09120]; PSYC 101 [PSY 01107]; SOCL 101 [SOC 08120] fulfill the Rowan HUML Humanistic Literacy requirement.

5. ENGL 201 [ENGL 02105]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; ENGL 213 [ENGL 02105]; ENGL 214 [ENGL 02107]; ENGL 216 [ENGL 02151]; PHIL 110 [PHIL 09250] fulfill the Rowan LIT Broad-Based Literature requirement.

APPENDIX E
2+2 A.S. IN CHEMISTRY AT ATLANTIC CAPE TO B.S. IN CHEMISTRY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**CHEM 111 General Chemistry II (4CR)** [CHEM 06101 Chemistry II (4CR) Lab Science]
2	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
3	**MATH 155 Calculus I (4CR)** [MATH 01130 Calculus I (4CR) Quantitative Literacy]	**MATH 156 Calculus II (4CR)** [MATH 01131 Calculus II (4CR)]
4	**Program Elective (4CR)**[1]	**GE Social Science Course (3CR)** [Global Literacy (3CR)][2]
5		**GE Humanities (3CR)** [Humanistic Literacy (3CR)][3]
	15 Total Semester Credits [15 Total Semester Credits]	**17 Total Semester Credits** [17 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**CHEM 211 Organic Chemistry II (4CR)** [CHEM 07201 Organic Chemistry II (4CR)]
2	**PHYS 225 General Physics I (4CR)** [PHYS 00220 Introductory Mechanics (4CR), Scientific Literacy, Lab Science]	**PHYS 226 Intro Electricity/Magnetism (4CR)** [PHYS 00222 Intro Electricity/Magnetism (4CR)]
3	**COMM 120 Public Speaking (3CR)** [CMS 04205 Public Speaking (3CR) Communicative Literacy]	**Any Gen Ed Course (3CR)** [Artistic Literacy (3CR)][4]
4	**Program Elective (3-4CR)**[1] ***RECOMMENDED:*** **MATH 255 Calculus III (4CR)** [MATH 01230 Calculus III (4CR)]	**If Technological Competency not fulfilled**[5]**, CISM 125 OR CISM 132 OR Free Elective (3CR)** [CS 01076 GE Computer Science Elective OR INTR 99070 Free Elective (3CR)]

	14-15 Total Semester Credits [14-15 Total Semester Credits]	**14 Total Semester Credits** [14 Total Semester Credits]
	ATLANTIC CAPE **60-61 TOTAL PROGRAM CREDITS**	**ROWAN** **60-61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	CHEM 08400 Physical Chemistry I (3CR)	CHEM 08401 Physical Chemistry II (3CR)
2	CHEM 08402 Physical Chemistry Lab I (2CR)	CHEM 08403 Physical Chemistry Lab II (2CR)
3	CHEM 07348 Biochemistry (4CR)	CHEM 06400 Advanced Inorganic Chemistry Lecture (3CR)
4	CHEM 06301 Inorganic Chemistry (3CR)	CHEM 06401 Advanced Inorganic Chemistry Lab (2CR)
5	CHEM 09250 Quantitative Analysis (4CR)	CHEM 05440 Research I (3CR)
6		CS 01104 Introduction to Programming and Problem Solving (3CR)
	16 Total Semester Credits	16 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	Program Restricted Elective #1 (3CR)	CHEM 09410 Instrumental Methods (4CR)
2	Program Restricted Elective #2 (3CR)	CHEM 05450 Senior Seminar (1CR)
3	Program Restricted Elective #3 (3-4CR)	INTR 06202 Nature of Science OR PHIL 09261 Philosophical Perspectives on Science – Writing Intensive (3CR)
4	MCB 01102 Foundations in Biology for Biomedical Sciences II (4CR)	Program Restricted Elective #4 (3-4CR)
5		If needed, LIT Literature Elective OR Free Elective (3CR)[6]
	13-14 Total Semester Credits	14-15 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120-122**

1. <u>ATLANTIC CAPE A.S. IN CHEMISTRY PROGRAM ELECTIVES:</u>
   BIOL 104 [BIOL 01077]; BIOL 109 [BIOL 01100 (4CR)]; BIOL 110 [BIOL 01101] (4CR); CISM 135 [CS 04103] (4CR); MATH 152 [MATH 01210 + INTR 99070] (4CR); MATH 255 [MATH 01230] (4CR); PHIL 101 [PHIL 09110] (3CR); PHYS 226 [PHYS 00222] (4CR)
2. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Global Literacy requirement.
3. ECO 110 [ECON 04101]; ENGL 104 [ENGL 02123]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; GOVT 110 [POSC 07110]; HIST 101 [HIST 05100]; HIST 102 [HIST 05101]; HIST 103 [HIST 05150]; HIST 104 [HIST 05151]; PHIL 102 [PHIL 09120]; PHIL 110 [PHIL 09150]; PHIL 115 [PHIL 09120]; PSYC 101 [PSY 01107]; SOCL 101 [SOC 08120] fulfill the Rowan HUML Humanistic Literacy requirement.

4. ARTS 103 [ARHS 03130]; MUSC 100 [MUSG 06109] fulfill the Rowan ARTL Artistic Literacy requirement.
5. The Technological Competency Requirement is fulfilled with CISM 125 OR CISM 132, which may be taken as a Gen Ed Elective, testing or reviewed department portfolio.
6. ENGL 201 [ENGL 02105]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; ENGL 213 [ENGL 02105]; ENGL 214 [ENGL 02107]; ENGL 216 [ENGL 02151]; PHIL 110 [PHIL 09250] fulfill the Rowan LIT Broad-Based Literature requirement.

APPENDIX F
2+2 A.S. IN BIOMEDICAL SCIENCE AT ATLANTIC CAPE TO
B.S. IN CHEMISTRY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**BIOL 109 General Biology I (4CR)** [BIOL 01100 Biology I (4CR)]	**BIOL 110 General Biology II (4CR)** [BIOL 01101 Biology II (4CR)]
2	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**CHEM 111 General Chemistry II (4CR)** [CHEM 06101 Chemistry II (4CR) Lab Science]
3	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
4	**MATH 155 OR MATH 220 (4CR)** [MATH 01130 OR STAT 02260 (3CR) + INTR 99070 (1CR) Quantitative Literacy]	**ARTS 103 OR MUSC 100 (3CR)** [ARHS 03130 OR MUSG 06109 (3CR) Artistic Literacy]
5		**Program Elective (3CR)**[1]
	15 Total Semester Credits [15 Total Semester Credits]	**17 Total Semester Credits** [17 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**BIOL 220 Human Anatomy & Physiology I (4CR)** [BIOL 10210 Human Anatomy & Physiology I (4CR) Lab Science]	**BIOL 250 Microbiology (4CR)** [BIOL 11330 Microbiology(4CR) Lab Science]
2	**PHIL 110 Introduction to Ethics (3CR)** [PHIL 09150 Introduction to Ethics (3CR) Humanistic Literacy, Broad-Based Literature]	**COMM 120 Introduction to Public Speaking (3CR)** [CMS 04205 Public Speaking (3CR) Communicative Literacy]
3	**BIOL 205 Genetics (4CR)** [MCB 01101 Fnds in Bio for Biomedical Science I (4CR)] *RU Program Restricted Elective #1*	**PSYC 101 General Psychology (3CR)** [PSY 01107 Essentials of Psychology (3CR) Humanistic Literacy]
4	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**CHEM 211 Organic Chemistry II (4CR)** [CHEM 07201 Organic Chemistry II (4CR)]
	15 Total Semester Credits [15 Total Semester Credits]	**14 Total Semester Credits** 14 Total Semester Credits]
	ATLANTIC CAPE	**ROWAN**

	61 TOTAL PROGRAM CREDITS	**61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	CHEM 08400 Physical Chemistry I (3CR)	CHEM 08401 Physical Chemistry II (3CR)
2	CHEM 08402 Physical Chemistry Lab I (2CR)	CHEM 08403 Physical Chemistry Lab II (2CR)
3	CHEM 07348 Biochemistry (4CR)	CHEM 06400 Advanced Inorganic Chemistry Lecture (3CR)
4	CHEM 06301 Inorganic Chemistry (3CR)	CHEM 06401 Advanced Inorganic Chemistry Lab (2CR)
5	CHEM 09250 Quantitative Analysis (4CR)	CS 01104 Introduction to Programming and Problem Solving (3CR)
6		CHEM 05440 Research I (3CR)
	16 Total Semester Credits	16 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	Program Restricted Elective #1 OR Free Elective (3CR)	CHEM 09410 Instrumental Methods (4CR)
2	Program Restricted Elective #2 (3CR)	CHEM 05450 Senior Seminar (1CR)
3	Program Restricted Elective #3 (4CR)	INTR 06202 Nature of Science OR PHIL 09261 Philosophical Perspectives on Science – Writing Intensive (3CR)
4	MCB 01102 Foundations in Biology for Biomedical Sciences II (4CR)	Program Restricted Elective #4 (3-4CR)
5		Free Elective (3CR)
	14 Total Semester Credits	13 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120**

1. ACCC ATLANTIC CAPE A.S. IN BIOMEDICAL SCIENCE PROGRAM ELECTIVES:
   BIOL 104 [BIOL 01077] (3CR); BIOL 205 [MCB 01101] (4CR); BIOL 221 [BIOL 01101] (4CR); CHEM 210 [CHEM 07200] (4CR); CHEM 211 [CHEM 07201] (4CR); CISM 135 [CS 04103] (4CR); MATH 155 [MATH 01130 Quantitative Literacy] (4CR); MATH 156 [MATH 01131] (4CR); MATH 220 [STAT 02260 + INTR 99070] (4CR); PHIL 101 [PHIL 09110] (3CR); PHYS 225 [PHYS 00220 Scientific Literacy, Lab Science] (4CR); PHYS 226 [PHYS 00222] (4CR)

APPENDIX G
2+2 A.S. IN ENVIRONMENTAL SCIENCE AT ATLANTIC CAPE TO B.S. IN CHEMISTRY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**BIOL 109 General Biology I (4CR)** [BIOL 01100 Biology I (4CR)]	**BIOL 110 General Biology II (4CR)** [BIOL 01101 Biology II (4CR)]
2	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**CHEM 111 General Chemistry II (4CR)** [CHEM 06101 Chemistry II (4CR) Lab Science]
3	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
4	**ENVL 100 Introduction to Environmental Science (4CR)** [EVSC 01121 Global Environmental Change (3CR) + INTR 99070 Free Elective (1CR)]	**MATH 155 OR MATH 220 (4CR)** MATH 01130 (4CR) OR STAT 02260 (3CR) + INTR 99070 (1CR) Quantitative Literacy]
5		**ENVL 140 Environmental Field & Lab Techniques (1CR)** [GEOG 06075 GE Geography Elective (1CR)]
	15 Total Semester Credits [15 Total Semester Credits]	**16 Total Semester Credits** [16 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**ESCI 100 Earth Science (4CR)** [GEOG 16130 Earth Sciences Lab I (4CR)]	**ENVL 225 Environmental Science Research Capstone (2CR)** [INTR 99070 Free Elective (2CR)]
2	**ENVL 205 Ecology (4CR)** [BIOL 01204 Intro to Ecology (4CR)]	**GE Humanities Course (3CR)** [Humanistic Literacy (3CR)][1]
3	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**CHEM 211 Organic Chemistry II (4CR)** [CHEM 07201 Organic Chemistry II (4CR)]
4	**ENVL 120 Weather and Climate (4CR)** [INTR 99070 Free Elective (4CR)]	**If Technological Competency not fulfilled[2], CISM 125 OR CISM 132 OR Any Gen Ed Course (3CR)** [CS 01076 OR INTR 99070 (3CR)]

5		**GE Social Science Course (3CR)** [Global Literacy (3CR)][3]
	16 Total Semester Credits [16 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	ATLANTIC CAPE **61 TOTAL PROGRAM CREDITS**	**ROWAN** **61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	CHEM 08400 Physical Chemistry I (3CR)	CHEM 08401 Physical Chemistry II (3CR)
2	CHEM 08402 Physical Chemistry Lab I (2CR)	CHEM 08403 Physical Chemistry Lab II (2CR)
3	CHEM 07348 Biochemistry (4CR)	CHEM 06400 Advanced Inorganic Chemistry Lecture (3CR)
4	CHEM 06301 Inorganic Chemistry (3CR)	CHEM 06401 Advanced Inorganic Chemistry Lab (2CR)
5	BIOL 11330 Microbiology (4CR)	CHEM 05440 Research I (3CR)
	16 Total Semester Credits	13 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	Program Restricted Elective #1 (3CR)	CHEM 09410 Instrumental Methods (4CR)
2	Program Restricted Elective #2 (3CR)	CHEM 05450 Senior Seminar (1CR)
3	Program Restricted Elective #3 (4CR)	INTR 06202 Nature of Science OR PHIL 09261 Philosophical Perspectives on Science – Writing Intensive (3CR)
4	BIOL 10210 Human Anatomy & Physiology I (4CR) Lab Science	Program Restricted Elective #4 (3-4CR)
5	If needed, ARTL Artistic Literacy[4] OR Free Elective (3CR)	If Needed, LIT Literature Elective OR Free Elective (3CR)[5]
	16 Total Semester Credits	14-15 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120-121**

1. ECO 110 [ECON 04101]; ENGL 104 [ENGL 02123]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; GOVT 110 [POSC 07110]; HIST 101 [HIST 05100]; HIST 102 [HIST 05101]; HIST 103 [HIST 05150]; HIST 104 [HIST 05151]; PHIL 102 [PHIL 09120]; PHIL 110 [PHIL 09150]; PHIL 115 [PHIL 09120]; PSYC 101 [PSY 01107]; SOCL 101 [SOC 08120] fulfill the Rowan HUML Humanistic Literacy requirement.
2. The Technological Competency Requirement is fulfilled with CISM 125 OR CISM 132, which may be taken as a Gen Ed Elective, testing or reviewed department portfolio.
3. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Global Literacy requirement.
4. ARTS 103 [ARHS 03130]; MUSC 100 [MUSG 06109] fulfill the Rowan ARTL Artistic Literacy requirement.
5. ENGL 201 [ENGL 02105]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; ENGL 213 [ENGL 02105]; ENGL 214 [ENGL 02107]; ENGL 216 [ENGL 02151]; PHIL 110 [PHIL 09250] fulfill the Rowan LIT Broad-Based Literature requirement.

APPENDIX H
2+2 A.S. IN BIOLOGY AT ATLANTIC CAPE TO
B.S. IN CHEMISTRY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**BIOL 109 General Biology I (4CR)** [BIOL 01100 Biology I (4CR)]	**BIOL 110 General Biology II (4CR)** [BIOL 01101 Biology II (4CR)]
2	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**CHEM 111 General Chemistry II (4CR)** [CHEM 06101 Chemistry II (4CR) Lab Science]
3	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
4	**MATH 155 Calculus I (4CR)** [MATH 01130 Calculus I Quantitative Literacy]	**MATH 156 Calculus II (4CR)** [MATH 01131 Calculus II (4CR)]
	15 Total Semester Credits [15 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**ARTS 103 OR MUSC 100 (3CR)** [ARHS 03130 OR MUSG 06109 (3CR) Artistic Literacy]
2	**CHEM 210 Organic Chemistry I (4CR)** [CHEM 07200 Organic Chemistry I (4CR)]	**GE Social Science Course (3CR)** [Global Literacy (3CR)][2]
3	**PHYS 226 Intro Electricity/Magnetism (4CR)** [PHYS 00222 Intro Electricity/Magnetism (4CR)]	**CHEM 211 Organic Chemistry II (4CR)** [CHEM 07201 Organic Chemistry II (4CR)]
4	**Program Elective (3CR)**[1]	**If Technological Competency not fulfilled**[3]**, CISM 125 OR CISM 132 OR Any Gen Ed Course (3CR)** [CS 01076 OR INTR (3CR)]
5		**GE Humanities Course (3CR)** [Humanistic Literacy (3CR)][4]
	15 Total Semester Credits [15 Total Semester Credits]	**16 Total Semester Credits** [16 Total Semester Credits]
	ATLANTIC CAPE 61 TOTAL PROGRAM CREDITS	**ROWAN 61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan

1	CHEM 08400 Physical Chemistry I (3CR)	CHEM 08401 Physical Chemistry II (3CR)
2	CHEM 08402 Physical Chemistry Lab I (2CR)	CHEM 08403 Physical Chemistry Lab II (2CR)
3	CHEM 07348 Biochemistry (4CR)	CHEM 06400 Advanced Inorganic Chemistry Lecture (3CR)
4	CHEM 06301 Inorganic Chemistry (3CR)	CHEM 06401 Advanced Inorganic Chemistry Lab (2CR)
5	CHEM 09250 Quantitative Analysis (4CR)	CS 01104 Introduction to Programming and Problem Solving (3CR)
6		CHEM 05440 Research I (3CR)
	17 Total Semester Credits	16 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	Program Restricted Elective #1 (3CR)	CHEM 09410 Instrumental Methods (4CR)
2	Program Restricted Elective #2 (3CR)	CHEM 05450 Senior Seminar (1CR)
3	Program Restricted Elective #3 (3CR)	INTR 06202 Nature of Science OR PHIL 09261 Philosophical Perspectives on Science – Writing Intensive (3CR)
4	MCB 01102 Foundations in Biology for Biomedical Sciences II (4CR)	Program Restricted Elective #4 (3CR)
5		If needed, LIT Literature Elective[5] OR Free Elective (3CR)
	13 Total Semester Credits	14 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**121**

1. ATLANTIC CAPE A.S. IN BIOLOGY PROGRAM ELECTIVES:
   BIOL 104 [BIOL 01077] (3CR); BIOL 205 [BIOL 01106 OR MCB 01101] (4CR); BIOL 250 [BIOL 11330] (4CR); CHEM 211 [CHEM 07201] (4CR); ENVL 205 (4CR) [BIOL 01204] (4CR); MATH 152 [MATH 01210 + INTR 99070] (4CR); MATH 156 [MATH 01131] (4CR); MATH 255 [MATH 01230] (4CR); PHIL 101 [PHIL 09110] (3CR); PHYS 125 [PHYS 00210] (4CR); PHYS 225 [PHYS 00220] (4CR); PHYS 126 [PHYS 00211] (4CR); PHYS 226 [PHYS 00222] (4CR)
2. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Global Literacy requirement.
3. The Technological Competency Requirement is fulfilled with CISM 125 OR CISM 132, which may be taken as a Gen Ed Elective, testing or reviewed department portfolio.
4. ECO 110 [ECON 04101]; ENGL 104 [ENGL 02123]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; GOVT 110 [POSC 07110]; HIST 101 [HIST 05100]; HIST 102 [HIST 05101]; HIST 103 [HIST 05150]; HIST 104 [HIST 05151]; PHIL 102 [PHIL 09120]; PHIL 110 [PHIL 09150]; PHIL 115 [PHIL 09120]; PSYC 101 [PSY 01107]; SOCL 101 [SOC 08120] fulfill the Rowan HUML Humanistic Literacy requirement.
5. ENGL 201 [ENGL 02105]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; ENGL 213 [ENGL 02105]; ENGL 214 [ENGL 02107]; ENGL 216 [ENGL 02151]; PHIL 110 [PHIL 09250] fulfill the Rowan LIT Broad-Based Literature requirement.

APPENDIX I
COLLEGE OF SCIENCE AND MATHEMATICS
COORDINATED B.S./M.S. PROGRAM IN PHARMACEUTICAL SCIENCES

The Master of Science in Pharmaceutical Sciences prepares students for a career in the highly interdisciplinary field of pharmaceutical sciences. The field of pharmaceutical science involves the integration of concepts from organic chemistry, biochemistry, physiology, pharmacology, and molecular biology for the design, and synthesis of drugs as well as for understanding the mechanism of drug action. As a practitioner in this field, graduates may work on the discovery and development of novel drugs, creating efficient use of existing drugs, and lowering the cost of therapy employing less expensive protocols for manufacturing drugs.

REQUIRED COURSES (16CR)

COURSE #	COURSE TITLE	CREDITS
CHEM 05530	Special Topics in Chemistry	3
CHEM 05550	Advanced Seminar	1
CHEM 07560	Advanced Biochemistry Lecture	3
CHEM 07564	Advanced Organic Synthesis	3
CHEM 07590	General Aspects Of Pharmacology	3
CHEM 07592	Advanced Pharmaceutical Chemistry	3

RESTRICTED ELECTIVES (CHOOSE 15CR)

COURSE #	COURSE TITLE	CREDITS
CHEM 05530	Special Topics in Chemistry	3
CHEM 06500	Modern Inorganic Chemistry	3
CHEM 06501	Modern Inorganic Chemistry Lab	2
CHEM 07512	Antibiotics	3
CHEM 07557	Chemical Biology	3
CHEM 07561	Advanced Biochemistry Laboratory	3
CHEM 07565	Organic Reactions And Mechanisms	3
CHEM 07568	Medicinal Chemistry	3
CHEM 07570	Organic Spectroscopy	3
CHEM 07572	Advanced Organometallic Chemistry	3
CHEM 07590	General Aspects Of Pharmacology	3
CHEM 07593	Regulatory Affairs	3
CHEM 07594	Good Laboratory Practice (GLP)/Good Manufacturing Practice (GMP) Techniques	3
CHEM 08505	Advanced Biophysical Chemistry	3
CHEM 08510	Advanced Survey Of Molecular Modeling Methods	3
CHEM 09510	Instrumental Analysis	3
CHEM 09520	Advanced Supramolecular Chemistry	3

CHEM 09522	Advanced Bioanalytical Chemistry	3

APPENDIX J
A.A.S. BUSINESS ADMINISTRATION AT ATLANTIC CAPE
TO B.A. IN CONSTRUCTION MANAGEMENT AT ROWAN

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) COML Communicative Literacy]	**ENGL 102 College Composition II (3CR)** [COMP 01112 College Composition II (3CR) COML]
2	**CISM 125 Introduction to Computers (3CR)** [CS 01076 Computer Science Elective (3CR)]	**HIST 101 OR HIST 102 OR HUMT 201/202 (3CR)** [HIST 05100 OR HIST 05101 (3CR) Humanistic Literacy OR INTR 02075 (3CR)]
3	**ECON 101/110 Macroeconomics (3CR)** [ECON 04101 Intro Macroeconomics (3CR) Humanistic Literacy]	**ECON 210 Microeconomics (3CR)** [ECON 01402 Intro Microeconomics (3CR) Humanistic Literacy]
4	**Gen Ed Math Course (4CR)**[1] [Quantitative Literacy (4CR)][2]	**Gen Ed Science Course (4CR)**[3] [Scientific Literacy (4CR)][4]
5	**BUSN 101 Introduction to Business (3CR)** [BUS 01105 Business Perspectives (3CR)]	
	16 Total Semester Credits [16 Total Semester Credits]	**13 Total Semester Credits** [13 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**ACCT 130 Financial Accounting (4CR)** [ACC 03210 Principles of Acctg I (3CR) + INTR 99070 Free Elective (1CR)]	**ACCT 131 Managerial Accounting (4CR)** [ACC 03211 Principles of Acctg II (3CR) + INTR 99070 Free Elective (1CR)]
2	**BUSN 202 Principles of Marketing (3CR)** [MKT 09200 Principles of Marketing (3CR)]	**BUSN/HOSP 205 Human Resources Management (3CR)** [INTR 99070 Free Elective (3CR)]
3	**BUSN 210 Business Law I (3CR)** [INTR 99070 Free Elective (3CR)]	**BUSN/CISM 247 Management Information Systems (3CR)** [MIS 02234 Management Information Systems (3CR)]
4	**BUSN 222 Principles of Management (3CR)** [INTR 99070 Free Elective (3CR)]	**BUSN 295 Career Development in Business Administration (2CR)** [BUS 01488 (2CR)]

5	**Any ACCT, BUSN, CISM, HOSP, LEGL OR OSTM Course (3CR)** [(3CR)]	**Any Liberal Arts OR Business Course (3CR)**
	16 Total Semester Credits [16 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	ATLANTIC CAPE 60 TOTAL PROGRAM CREDITS	**ROWAN 60 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	If needed, GLBL Global Literacy OR Free Elective (3CR)[5]	If needed, LIT OR Free Elective (3CR)[8]
2	If needed, ARTL Artistic Literacy OR Free Elective (3CR)[6]	CMS 04205 Public Speaking or CMS 04206 Digital Presentations (3CR) Communicative Literacy
3	If needed, SCIL Scientific Literacy OR Free Elective (3CR)[4]	If needed, QNTL Quantitative Literacy Course OR Free Elective (4CR)[2]
4	CM 01301 Fundamentals of the Construction Industry I (3CR) CM CUGS[7]	CM 01302 Fundamentals of the Construction Industry II (3CR) CM CUGS[7]
5	Free Elective (3CR)	CM 01303 Project Building Systems (3CR) CM CUGS[7]
	15 Total Semester Credits	16 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	CM 01409 Building Energy Systems for Construction Managers (3CR) PM CUGS[7]	Free Elective (2CR)
2	CM 01304 Project Administration (3CR) CM CUGS[7]	CM 01412 Capstone Course - WI - Writing Intensive (3CR) CL CUGS[7]
3	CM 01407 Advanced Leadership and Communication (3CR) CL CUGS[7]	CM 01411 Construction Safety & Loss Prevention (3CR) CL CUGS[7]
4	CM 01306 Construction Project Planning and Scheduling (3CR) PM CUGS[7]	CM 01410 Building Construction Systems and Codes (3CR) PM CUGS[7]
5	CM 01305 Construction Cost Account, Estimating, and Finance (3CR) PM CUGS[7]	CM 01408 Industry Relations in the Construction Industry (3CR) CL CUGS[7]
	15 Total Semester Credits	14 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120**

1. ACCC GE (4CR) Math Options: MATH 121 [MATH 01115 + INTR 99070]; MATH 122 [MATH 01123 + INTR 99070]; MATH 150 [MATH 01122]; MATH 152 [MATH 01210 + INTR 99070]; MATH 155 [MATH 01130]; MATH 156 [MATH 01131]; MATH 220 [STAT 02260 + INTR 99070]; MATH 255 [MATH 01230]

2. MATH 121 [MATH 01115 + INTR 99070]; MATH 155 [MATH 01130] fulfill the Rowan QNTL Quantitative Literacy requirement.
3. ACCC GE (4CR) Science Options: BIOL 101 [ASTR 17070]; BIOL 103 [BIOL 01113]; BIOL 109 [BIOL 01100]; BIOL 110 [BIOL 01101]; BIOL 118 [BIOL 01110 + BIOL 01076]; BIOL 220 [BIOL 10210]; BIOL 221[BIOL 10212]; CHEM 100 [CHEM 05100 + INTR 99070]; CHEM 110 [CHEM 06100]; CHEM 111 [CHEM 06101]; CHEM 210 [CHEM 07200]; ESCI 100 [GEOG 16130]; PHYS 100 [PHYS 00150]; PHYS 102 [ASTR 11120]; PHYS 125 [PHYS 00210]; PHYS 126 [PHYS 00211]; PHYS 225 [PHYS 00220]; PHYS 226 [PHYS 00222]
4. BIOL 103 [BIOL 01113]; BIOL 109 [BIOL 01100]; BIOL 110 [BIOL 01101]; CHEM 110 [CHEM 06100]; ESCI 100 [GEOG 16130]; PHYS 100 [PHYS 00150]; PHYS 102 [ASTR 11120]; PHYS 225 [PHYS 00220] fulfill the Rowan SCIL Scientific Literacy requirement.
5. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Global Literacy requirement.
6. ARTS 103 [ARHS 03130]; MUSC 100 [MUSG 06109] fulfill the Rowan ARTL Artistic Literacy requirement.
7. See Appendix D for more information regarding Henry M. Rowan College of Engineering's Construction Management Certificate of Undergraduate Studies (CUGS) program.
8. ENGL 201 [ENGL 02105]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; ENGL 213 [ENGL 02105]; ENGL 214 [ENGL 02107]; ENGL 216 [ENGL 02151]; PHIL 110 [PHIL 09250] fulfill the Rowan LIT Broad-Based Literature requirement.

APPENDIX K

2+2 A.S IN ENGINEERING AT ATLANTIC CAPE
TO B.A. IN CONSTRUCTION MANAGEMENT AT ROWAN

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) COML Communicative Literacy]	**ENGL 102 College Composition II (3CR)** [COMP 01112 College Composition II (3CR) COML]
2	**CISM 125 Introduction to Computers (3CR)** [CS 01076 Computer Science Elective (3CR)]	**ENGL 104 Intro to Literature (3CR)** [ENGL 02123 Topics in Literature (3CR) HUML Humanistic Literacy, LIT Broad-Based Literature]
3	**ENGR 101 Introduction to Engineering (2CR)** [ENGR 01101 First Year Engr Clinic I (2CR)]	**ENGR 200 Engineering Design (3CR)** [ENGR 01102 First Year Engr Clinic II (2CR) + INTR 99070 (1CR)]]
4	**MATH 155 Calculus I (4CR)** [MATH 01130 Calculus I (4CR) QNTL Quantitative Literacy]	**MATH 156 Calculus II (4CR)** [MATH 01131 01131 Calculus II (4CR)]
5	**PHYS 225 Introductory Mechanics (4CR)** [PHYS 00220 Introductory Mechanics (4CR) SCIL Scientific Literacy]	**PHYS 226 Intro Electricity/Magnetism (4CR)** [PHYS 00222 Intro Electricity/Magnetism (4CR)]
	16 Total Semester Credits [16 Total Semester Credits]	**17 Total Semester Credits** [17 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**CHEM 110 Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) SCIL]	**ENGR 204 Dynamics (3CR)** [ENGR 01291 Dynamics (2CR) + INTR 99070 Free Elective (1CR)]]
2	**ENGR 201 Statics (3CR)** [ENGR 01271 Statics (2CR) + INTR 99070 Free Elective (1CR)]	**MATH 256 Differential Equations (4CR)** [MATH 01231 Ordinary Differ Equations (3CR) + INTR 99070 Free Elective (1CR)]
3	**MATH 255 Calculus III (4CR)** [MATH 01230 Calculus III (4CR)]	**ENGR 203 (4CR) OR ENGR 202 (3CR)** [CS 01076 (4CR) OR ENGR 01273 (3CR)]
4	**ECON 110 OR PSYC 101 OR SOCL 101(3CR)** [ECON 04101 OR PSY 01107 OR SOC 08120 (3CR) HUML]	**ARTS 103 OR ARTS 115 OR MUSC 100 OR PSYC 101 OR SOCL 101 OR THEA 110 (3CR)** [ARHS 03130 OR ARHS 03100 OR MUSG 06109 OR PSY 01107 OR SOC 08120 OR THD 07201 (3CR)]

	14 Total Semester Credits [14 Total Semester Credits]	**13-14 Total Semester Credits** [13-14 Total Semester Credits]
	ATLANTIC CAPE **60-61 TOTAL PROGRAM CREDITS**	**ROWAN** **60-61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	If needed, GLBL Global Literacy OR Free Elective (3CR)[1]	CMS 04205 Public Speaking or CMS 04206 Digital Presentations (3CR) COML
2	If needed, ARTL Artistic Literacy OR Free Elective (3CR)[2]	Free Elective (3CR)
3	CM 01301 Fundamentals of the Construction Industry I (3CR) CM CUGS[3]	CM 01302 Fundamentals of the Construction Industry II (3CR) CM CUGS[3]
4	Free Elective (3CR)	Free Elective (3CR)
5	Free Elective (3CR)	Free Elective (2-3CR)
	15 Total Semester Credits	14-15 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	CM 01409 Building Energy Systems for Construction Managers (3CR) PM CUGS[3]	
2	CM 01304 Project Administration (3CR) CM CUGS[3]	CM 01412 Capstone Course - WI - Writing Intensive (3CR) CL CUGS[3]
3	CM 01407 Advanced Leadership and Communication (3CR) CL CUGS[3]	CM 01303 Project Building Systems (3CR) CM CUGS[3]
4	CM 01306 Construction Project Planning and Scheduling (3CR) PM CUGS[3]	CM 01410 Building Construction Systems and Codes (3CR) PM CUGS[3]
5	CM 01305 Construction Cost Account, Estimating, and Finance (3CR) PM CUGS[3]	CM 01408 Industry Relations in the Construction Industry (3CR) CL CUGS[3]
	15 Total Semester Credits	15 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120-121**

1. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Globalistic Literacy requirement.
2. ARTS 103 [ARHS 03130]; MUSC 100 [MUSG 06109] fulfill the Rowan ARTL Artistic Literacy requirement.
3. See Appendix D for more information regarding Henry M. Rowan College of Engineering's Construction Management Certificate of Undergraduate Studies (CUGS) program.

APPENDIX L
2+2 A.A.S. TECHNICAL STUDIES AT ATLANTIC CAPE
TO B.A. IN CONSTRUCTION MANAGEMENT AT ROWAN

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) COML Communicative Literacy]	**ENG 102 College Composition II (3CR)** [COMP 01112 College Composition II (3CR) COML]
2	**CISM 125 Introduction to Computers (3CR)** [CS 01076 Computer Science Elective (3CR)]	**Free Elective (3CR)**
3	**GE Humanities or Social Science Course (3CR)** [HUML Humanistic Literacy or GLBL Global Literacy (3CR)][1,2]	**Program Elective #1 (3CR)**[3]
4	**Free Elective (3CR)**	**Program Elective #2 (3CR)**[3]
5	**Free Elective (3CR)**	**Program Elective #3 (3CR)**[3]
	15 Total Semester Credits [15 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**Program Elective #4 (3CR)**[3]	**If needed, Program Elective #9 (3CR)**[4]
2	**Program Elective #5 (3CR)**[3]	**If needed, Program Elective #10 (3CR)**[4]
3	**If needed, Program Elective #6 (3CR)**[4]	**If needed, Program Elective #11 (3CR)**[4]
4	**If needed, Program Elective #7 (3CR)**[4]	**If needed, Program Elective #12 (3CR)**[4]
5	**If needed, Program Elective #8 (3CR)**[4]	**If needed, Program Elective #13 (3CR)**[4]
	15 Total Semester Credits [15 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	ATLANTIC CAPE 60 TOTAL PROGRAM CREDITS	**ROWAN 60 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	If needed, HUML OR GLBL OR Free Elective (3CR)[1,2]	If needed, LIT OR Free Elective (3CR)[7]
2	If needed, ARTL OR Free Elective (3CR)[5]	CMS 04205 Public Speaking or CMS 04206 Digital Presentations (3CR) Communicative Literacy
3	If needed, SCIL OR Free Elective (3-4CR)[6]	If needed, QNTL Quantitative Literacy Course (4CR)[8]
4	Free Elective (3CR)	Free Elective (3CR)

5	Free Elective (3CR)	Free Elective (2-3CR)
	15 Total Semester Credits	15 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	CM 01301 Fundamentals of the Construction Industry I (3CR) CM CUGS[9]	CM 01302 Fundamentals of the Construction Industry II (3CR) CM CUGS[9]
2	CM 01304 Project Administration (3CR) CM CUGS[9]	CM 01412 Capstone Course - WI - Writing Intensive (3CR) CL CUGS[9]
3	CM 01407 Advanced Leadership and Communication (3CR) CL CUGS[9]	CM 01303 Project Building Systems (3CR) CM CUGS[9]
4	CM 01306 Construction Project Planning and Scheduling (3CR) PM CUGS[9]	CM 01410 Building Construction Systems and Codes (3CR) PM CUGS[9]
5	CM 01305 Construction Cost Account, Estimating, and Finance (3CR) PM CUGS[9]	CM 01408 Industry Relations in the Construction Industry (3CR) CL CUGS[9]
	15 Total Semester Credits	15 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120**

1. ECO 110 [ECON 04101]; ENGL 104 [ENGL 02123]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; GOVT 110 [POSC 07110]; HIST 101 [HIST 05100]; HIST 102 [HIST 05101]; HIST 103 [HIST 05150]; HIST 104 [HIST 05151]; PHIL 102 [PHIL 09120]; PHIL 110 [PHIL 09150]; PHIL 115 [PHIL 09120]; PSYC 101 [PSY 01107]; SOCL 101 [SOC 08120] fulfill the Rowan HUML Humanistic Literacy requirement.
2. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Globalistic Literacy requirement.
3. Program courses may be selected from the following A.A.S. degrees: Air Traffic Control Terminal, Business Administration, Computer Programming, Computer Systems Support, Culinary Arts, Cybersecurity, Food Service Management, Hospitality Management, Media Studies, and Office Systems Technology
4. Students may be eligible for up to 25CR, through Prior Learning Assessment (PLA), depending on their work experience and training. PLA is defined as college-level knowledge gained outside of the traditional classroom. Methods include credit-by-examination, evaluated certifications and portfolio evaluation.
5. ARTS 103 [ARHS 03130]; MUSC 100 [MUSG 06109] fulfill the Rowan ARTL Artistic Literacy requirement.
6. BIOL 103 [BIOL 01113]; BIOL 109 [BIOL 01100]; BIOL 110 [BIOL 01101]; CHEM 110 [CHEM 06100]; ESCI 100 [GEOG 16130]; PHYS 100 [PHYS 00150]; PHYS 102 [ASTR 11120]; PHYS 225 [PHYS 00220] fulfill the Rowan SCIL Scientific Literacy requirement.
7. ENGL 201 [ENGL 02105]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; ENGL 213 [ENGL 02105]; ENGL 214 [ENGL 02107]; ENGL 216 [ENGL 02151]; PHIL 110 [PHIL 09250] fulfill the Rowan LIT Broad-Based Literature requirement.

8. MATH 121 [MATH 01115 + INTR 99070]; MATH 155 [MATH 01130] fulfill the Rowan QNTL Quantitative Literacy requirement.
9. See Appendix D for more information regarding Henry M. Rowan College of Engineering's Construction Management Certificate of Undergraduate Studies (CUGS) program.

APPENDIX M

ROWAN CONSTRUCTION MANAGEMENT
CERTIFICATE OF UNDERGRADUATE STUDIES (CUGS)

CONSTRUCTION MANAGEMENT CUGS

The Construction Management CUGS is designed for students entering the construction field and are looking to get a fundamental understanding of how the industry works. The certificate covers the standard design phases: programming, conceptual design, schematic design, design development, construction documents and construction administration.

COURSE #	REQUIRED COURSES (12CR)
CM 01301	Fundamentals of the Construction Industry I
CM 01302	Fundamentals of the Construction Industry II
CM 01303	Project Building Systems
CM 01304	Project Administration

CONSTRUCTION PROJECT MANAGEMENT CUGS

The Project Management CUGS is intended for students who have a basic understanding of the construction processes and are ready to obtain more in-depth industry knowledge. It covers concepts related to space use and occupancy, types of contraction, fire-resistive construction, interior finishes, building materials, inspections and tests. Students will familiarize themselves with construction building codes with reference to the International Building Codes (IBC).

COURSE #	REQUIRED COURSES (12CR)
CM 01305	Construction Cost Accounting, Estimating & Finance
CM 01306	Construction Project Planning & Scheduling
CM 01409	Building Energy Systems for Construction Managers
CM 01410	Building Construction Systems & Codes

CONSTRUCTION LEADERSHIP CUGS

The Construction Leadership CUGS is designed for students who wish to learn the unionized environment of the construction field as well as the communication, writing and research skills required to be an effective construction leader. It covers various perspectives on the collective bargaining systems and includes legal and regulatory environment, problem-solving and the roles of labor and corporation. The applied research contained within the Construction Leadership certificate will allow students to become subject matter experts ready to lead construction units and/or their very own construction companies.

COURSE #	REQUIRED COURSES (12CR)
CM 01407	Advanced Leadership & Communication
CM 01408	Industrial Relations in the Construction Industry
CM 01411	Construction Safety & Loss Prevention

CM 01412	Capstone Course - Writing Intensive

APPENDIX N
ROWAN UNIVERSITY
MASTER OF ENGINEERING MANAGEMENT (MEM)

The MEM online program provides professional engineers with the leadership skills they need to advance to management-level positions. The MEM makes it convenient for working professionals to attend class while pursuing their engineering management career goals. Students explore administrative procedures such as organizational behavior and teamwork, strategic decision making, and supervising. The combination of engineering and business courses provide an ideal balance of advanced technical concepts and managerial skills with a focus on project management.

Program Overview:

10 Courses/30 Credits
Part-time program offered in an accelerated online format.[1]
Students can focus on one of two tracks:

1. Construction management
2. Project management

REQUIRED COURSES (18CR)

COURSE #	COURSE TITLE	CREDITS
EM 01501	Engineering Economics	3
EM 01511	Strategic Risk Management	3
EM 01512	Quality in Engineering Management	3
EM 01513	Engineering Decisions	3
EM 01541	Engineering Law and Ethics	3
EM 01542	Facilities Management	3
EM 01543	Systems in Engineering Management	3
MGT 06666	Managing Engineering Teams	3
MGT 06677	Management Skills for Engineers	3
MIS 02526	Project Management for Engineers	3

CONSTRUCTION MANAGEMENT TRACK COURSES (12CR)

COURSE #	COURSE TITLE	CREDITS
EM 01521	Construction Management	3
EM 01522	Construction Scheduling	3
EM 01523	Cost Engineering	3
CEE 08504	Engineering Estimating	3

PROJECT MANAGEMENT TRACK COURSES (12CR)

COURSE #	COURSE TITLE	CREDITS
EM 01513	Engineering Decision Making	3
MGT 06677	Management Skills for Engineers	3
MGT 06666	Managing Engineering Teams	3
EM 05142	Facilities Management	3

1. 2 courses are scheduled per semester for 5 consecutive semesters resulting in possible degree completion in less than 24 months.

Note: The courses listed above are not official and are subject to change. For an official list of available courses please visit the Rowan Global section tally.

APPENDIX O
2+2 A.A.S. IN COMPUTER INFORMATION SYSTEMS AT ATLANTIC CAPE TO B.S. IN DATA SCIENCE AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**CISM 125 Introduction to Computers (3CR)** [CS 01076 Computer Science Elective (3CR)]	**CISM 154 Computer Programming Java (4CR)** [CS 04113 Intro Object-Oriented Programming (4CR)]
2	**MATH 155 Calculus I (4CR)** [MATH 01130 Calculus I (4CR) Quantitative Literacy]	**ANT 103 OR GEO 102 OR GEO 110 (3CR)** [ANTH 02202 OR GEOG 16110 OR GEOG 16140 Global Literacy (3CR)]
3	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENG 102 College Composition II (3CR)** [COMP 01112 College Composition II (3CR) Communicative Literacy]
4	**CHEM 110 OR PHYS 102 (4CR)** [CHEM 06100 OR ASTR 11120 (4CR) Scientific Literacy]	**MATH 220 Statistical Methods (4CR)** [STAT 02260 Statistics I (3CR) + INTR 99070 Free Elective (1CR)]
5	**BUSN 222 Principles of Management (3CR)** [INTR 99070 Free Elective (3CR)]	
	17 Total Semester Credits [17 Total Semester Credits]	**14 Total Semester Credits** [14 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**CISM 254 Advanced Computer Programming Java (4CR)** [CS 04114 Obj-Orient Prgrm/Data Abstr (2CR) + INTR 99070 Free Elective (2CR)]	**CISM 160 Systems Analysis and Design (3CR)** [INTR 99070 Free Elective (3CR)]
2	**MATH 153 Discrete Mathematics (4CR)** [MATH 03150 Discrete Mathematics (3CR) + MATH 01075 GE Math Elective (1CR)]	**CISM 222 Issues in Computer Society (3CR)** [CS 01211 Principles of Information Security (3CR)]
3	**PHIL 110/111 Intro to Ethics (3CR)** [PHIL 09150 Intro to Ethics (3CR) Humanistic Literacy & Broad-Based Literature]	**CISM 247 Management Information Systems (3CR)** [MIS 02234 Management Information Systems (3CR)]

4	**TCOM 125 Technical Communication (3CR)** [WA 01302 Intro to Technical Writing (3CR) Writing Intensive][1]	**ARTS 103 OR MUSC 100 (3CR)** [ARHS 03130 OR MUSG 06109 (3CR) Artistic Literacy (3CR)]
5		**Any other CISM OR GIST Course (3CR)**
	14 Total Semester Credits [14 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	ATLANTIC CAPE **60 TOTAL PROGRAM CREDITS**	**ROWAN** **60 TOTAL TRANSFER CREDITS**
	Summer Semester (ACCC OR RU)	
1	ACCC- MATH 156 Calculus II OR RU-MATH 01131 Calculus II (4CR)	
	4 Total Semester Credits [4 Total Semester Credits]	
	Semester 5 Rowan	Semester 6 Rowan
1	CMS 04205 Public Speaking OR CMS 04206 Digital Presentations (3CR)	STAT 02320 Concepts in Statistical Data Analysis (3CR)
2	DS 01100 Intro to Data Sci (3CR)	CS 04225 Principles of Data Structures (3CR)
3	MATH 01210 Linear Algebra (3CR)	DS 01390 Data Science Research I (3CR)
4	CS 01104 Introduction to Programming and Problem Solving (3CR)	MATH 01230 Calculus III (4CR)
5		WI Writing Intensive Course (3CR)[1]
	12 Total Semester Credits	16 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	STAT 02360 Probability & Random Variables (3CR)	Upper-level Data Science Elective #1 (3CR)
2	CS 02370 Intro to Information Visualization (3CR)	Upper-level Data Science Elective #2 (3CR)
3	CS 04430 Database Systems: Theory and Programming (3CR)	Upper-level Data Science Elective #3 (3CR)
4	CS 07455 Machine Learning (3CR)	CS 02480 Intro to Data Mining OR STAT 02340 Elements of Stat Learning (3CR)
5	DS 01490 Data Science Research II (3CR)	CS 02421 Big Data Tools & Techniques (3CR)
	15 Total Semester Credits	15 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**122**

1. Students must take a WI course at Rowan to fulfill the Writing Intensive requirement.

APPENDIX P
2+2 A.S. IN ENVIRONMENTAL SCIENCE AT ATLANTIC CAPE TO B.S. IN ENVIRONMENTAL SCIENCE AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

ACCC courses are offered at the Cape May campus and Cape May Point Science Center. Course numbers/titles are identical at both locations.

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**BIOL 109 General Biology I (4CR)** [BIOL 01100 Biology I (4CR)]	**Program Elective (3CR)**[1]
2	**CHEM 110 General Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy & Lab Science]	**ENVL 120 Weather and Climate (4CR)** [INTR 99070 Free Elective (4CR)]
3	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENGL 102 Composition II (3CR)** [COMP 01112 College Comp II (3CR) Communicative Literacy]
4	**ENVL 100 Introduction to Environmental Science (4CR)** [EVSC 01121 Global Environmental Change (3CR) + INTR 99070 Free Elective (1CR)]	**MATH 155 OR MATH 220 (4CR)**[2] [MATH 01130 (4CR) OR STAT 02260 (3CR) + INTR 99070 (1CR) Quantitative Literacy]
5		**ENVL 140 Environmental Field & Lab Techniques (1CR)** [GEOG 06075 GE Geography Elective (1CR)]
	16 Total Semester Credits [16 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**ESCI 100 Earth Science (4CR)** [GEOG 16130 Earth Sciences Lab I (4CR)]	**ENVL 225 Environmental Science Research Capstone (2CR)** [INTR 99070 Free Elective (2CR)]
2	**ENVL 205 Ecology (4CR)** [BIOL 01204 Intro to Ecology (4CR)]	**Program Elective (4CR)**[1]
3	**Program Elective (3CR)**[1]	**Any GE Course (3CR)** [Humanistic Literacy (3CR)][4]
4	**GE Social Science Course (3CR)** [Global Literacy (3CR)][3]	**MATH 155 Calculus I OR MATH 220 Statistical Methods (4CR)**[2] [MATH 01130 Calculus I (4CR) OR STAT 02260 Statistics I (3CR) + INTR 99070 Free Elective (1CR) Quantitative Literacy]

5	**ARTS 103 OR ARTS 108 OR ARTS 115 OR DANC 170 OR MUSC 100 OR THEA 110 (3CR)** [ARHS 03130 (ARTL)[5] OR ARHS 03103 OR ARHS 03100 OR THD 08315 (ARTL)[5] OR MUSG 06109 (ARTL)[5] OR THD 07201 (3CR)	
	17 Total Semester Credits [17 Total Semester Credits]	**13 Total Semester Credits** [13 Total Semester Credits]
	ATLANTIC CAPE **61 TOTAL PROGRAM CREDITS**	**ROWAN** **61 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	CMS 04205 Public Speaking (3CR) Communicative Literacy	EVSC 01115 Environment in the Headlines (1CR)
2	EVSC 01202 Environmental Science Research Methods and Data Analysis (4CR)	BIOL 01204 Biology 4: Global Ecology (4CR)
3	EVSC 01110 The Environmental Experience (1CR)	EVSC 01220 Global Climate Crisis (3CR)
4	BIOL 01203 Biology 3: Cell Biology (4CR)	ENST 94101 Human Nature: Introduction to Environmental and Sustainability Studies (3CR)
5	If needed, GEOG 16160 Intro to Mapping and GIS (3CR) Artistic Literacy OR Free Elective[5]	If needed, LIT Literature Course OR Free Elective (3CR)[6]
	15 Total Semester Credits	14 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	EVSC 01350 Field Methods in Environmental Science (4CR)	Program Restricted Elective (3CR)
2	EVSC 01380 Atmosphere and Climate OR EVSC 01385 Oceans (4CR)	EVSC 01410 Environmental Science Clinic OR EVSC 01420 Senior Seminar in Environmental Science (WI) (3CR)
3	ENST 94301 Environmental Ethics (3CR)	Program Restricted Elective (3CR)
4	EVSC 01305 Contaminants in the Environment (4CR)	Program Restricted Elective (3CR)
5	If needed, Free Elective (1CR) *Total 120CR required for B.S.*	Program Restricted Elective (3CR)
	15 Total Semester Credits	15 Total Semester Credits
	DEGREE PROGRAM TOTAL CREDITS	**120**

1. A.S. IN ENVIRONMENTAL SCIENCE PROGRAM ELECTIVES:
   AVIT 185 [INTR 99070] (3CR); BIOL 110 [BIOL 01101 Scientific Literacy] (4CR); BIOL 205 [BIOL 01106 OR MCB 01101] (4CR); CHEM 111 [CHEM 06101] (4CR);

CHEM 210 [CHEM 07200] (4CR); CHEM 211 [CHEM 07201] (4CR); ENGL 224 [ENGL 02075 (LIT Literature)] (3CR); GIST 101 [GEOG 16160 + INTR 99070 ARTL Artistic Literacy] (4CR); GIST 150 [INTR 99070] (3CR); MATH 156 [MATH 01131] (4CR); PHYS 125 [PHYS 00210] (4CR); PHYS 126 [PHYS 00211] (4CR); PHYS 226 [PHYS 00222] (4CR); TCOM 125 [WA 01302 WI Writing Intensive] (3CR)

2. Rowan B.S. Program requires MATH 01130 Calculus I and STAT 02260 Statistics I.
3. ANT 103 [ANTH 02202]; GEO 102 [GEOG 16110]; GEO 110 [GEOG 16140] fulfill the Rowan GLBL Globalistic Literacy requirement.
4. ECO 110 [ECON 04101]; ENGL 104 [ENGL 02123]; ENGL 205 [ENGL 02113]; ENGL 206 [ENGL 02113]; GOVT 110 [POSC 07110]; HIST 101 [HIST 05100]; HIST 102 [HIST 05101]; HIST 103 [HIST 05150]; HIST 104 [HIST 05151]; PHIL 102 [PHIL 09120]; PHIL 110 [PHIL 09150]; PHIL 115 [PHIL 09120]; PSYC 101 [PSY 01107]; SOCL 101 [SOC 08120] fulfill the Rowan HUML Humanistic Literacy requirement.
5. ACCC A.S. Program Elective option GIST 101 Intro to Geographic Information Systems is equivalent to B.S. required course GEOG 16160 Intro to Mapping. The course also fulfills the Rowan Core requirement for ARTL Artistic Literacy.
6. ACCC A.S. Program Elective option ENGL 224 Environmental Literature fulfills the Rowan LIT Literature Core requirement. Additionally, there are Gen Ed Humanities (semester 4) courses that fulfill the LIT requirement: PHIL 106 [PHIL 09240] (3CR) OR PHIL 110/111 [PHIL 09150] (3CR)

APPENDIX Q
2+2 A.A.S. IN HEALTH SCIENCE AT ATLANTIC CAPE TO
B.S. IN RESPIRATORY THERAPY AT ROWAN UNIVERSITY

Key: The course in **bold** is the course the student should take. [The course in brackets is the equivalent course at Rowan]

	Semester 1 Atlantic Cape	Semester 2 Atlantic Cape
1	**ENGL 101 Composition I (3CR)** [COMP 01111 College Comp I (3CR) Communicative Literacy]	**ENG 102 College Composition II (3CR)** [COMP 01112 College Composition II (3CR) Communicative Literacy]
2	**HESC 100 Intro to Health Professions (3CR)** [INTR 99070 Free Elective (3CR)]	**BIOL 220 Human Anatomy & Physiology I (4CR)** [BIOL 10210 Human Anatomy & Physiology I (4CR); Required prerequisite course]
3	**PSYC 101 General Psychology (3CR)** [PSY 01107 Essentials of Psychology (3CR) Humanistic Literacy; Required prerequisite course]	**HESC 105 Intro to Public Health (3CR)** [INTR 99070 Free Elective (3CR)]
4	**SOCL 101 Principles of Sociology (3CR)** [SOC 08120 Intro to Sociology (3CR) Humanistic Literacy]	**HESC 108 Fundamentals of Nutrition (3CR)** [NUT 00200 Basic Nutrition (3CR)]
5	**BIO 109 Biology I (4CR)** [BIOL 01100 Biology I (4CR) Scientific Literacy]	**MAT 122 College Algebra (3CR)** [MATH 01123 College Algebra (3CR); Required prerequisite course]
	16 Total Semester Credits [16 Total Semester Credits]	**16 Total Semester Credits** [16 Total Semester Credits]
	Semester 3 Atlantic Cape	Semester 4 Atlantic Cape
1	**HESC 110 Comprehensive Medical Terminology (3CR)** [HES 00202 Medical Terminology (3CR); Required prerequisite course]	**BIOL 250 Microbiology (4CR)** [BIOL 11330 Microbiology (4CR) ; Required prerequisite]
2	**HESC 132 Basic Pharmacology (3CR)** [NURS 03308 Pharmacology for Nursing (3CR)]	**CHEM 110 Chemistry I (4CR)** [CHEM 06100 Chemistry I (4CR) Scientific Literacy; Required prerequisite course]
3	**MATH 220 Statistical Methods (4CR)** [STAT 02260 Statistics I (3CR) + INTR 99070 Free Elective (1CR) Quantitative Literacy; Required prerequisite course]	**BIOL 103 Biology Our World (4CR)** [BIOL 01113 General Bio- Human Focus (4CR]
4	**PHIL 104 Bioethics: Realities of the New Millennium (3CR)** [PHIL 09341 Biomedical Ethics (3CR)]	**HIST 101 OR HIST 102 OR HIST 103 OR HIST 104 (3CR)**

		[HIST 05100 OR HIST 05101 OR HIST 05150 OR HIST 05151 (3CR) Humanistic Literacy]
	BIOL 121 Human Anatomy & Physiology II (4CR) [BIOL 10212 Human Anatomy & Physiology II (4CR); Required prerequisite course]	
	17 Total Semester Credits [17 Total Semester Credits]	**15 Total Semester Credits** [15 Total Semester Credits]
	ATLANTIC CAPE **64 TOTAL PROGRAM CREDITS**	**ROWAN** **64 TOTAL TRANSFER CREDITS**
	Semester 5 Rowan	Semester 6 Rowan
1	RESP 09300 Fundamentals of Respiratory Care Lecture (3CR)	RESP 09310 Principles of Ventilatory Support 1 Lecture (3CR)
2	RESP 09301 Fundamentals of Respiratory Care Lab (2CR)	RESP 09311 Principles of Ventilatory Support 1 Lab (2CR)
3	RESP 09302 Cardiopulmonary Anatomy & Physiology (3CR)	RESP 09306 Cardiopulmonary Evaluation (3CR)
4	RESP 09303 Respiratory Care Pharmacology (2CR)	RESP 09307 Cardiopulmonary Pathophysiology (3CR)
5	RESP 09304 Critical Care (3CR)	RESP 09315 Clinical Practice II (2CR)
6	RESP 09305 Clinical Practice I (2CR)	PHIL 09341 Biomedical Ethics (3CR) Writing Intensive
7	If needed, CMS 04205 Public Speaking OR ARTL Artistic Literacy Elective (3CR)[1] OR LIT Literature Elective OR GLBL Global Literacy Elective (3CR)[2]	If needed, CMS 04205 Public Speaking OR ARTL Artistic Literacy Elective (3CR)[1] OR LIT Literature Elective OR GLBL Global Literacy Elective (3CR)[2]
	15-18 Total Semester Credits	16-19 Total Semester Credits
	Semester 7 Rowan	Semester 8 Rowan
1	RESP 09410 Principles of Ventilatory Support 2 Lecture (3CR)	RESP 09404 Respiratory Care in the Long Term, Home Care, & Rehab Setting (3CR)
2	RESP 09411 Principles of Ventilatory Support 2 Lab (2CR)	RESP 09401 Evidence-based Practice (3CR)
3	RESP 09402 Pediatric & Neonatal Respiratory Care Lecture (3CR)	HCNV 07401 Interprofessional Teamwork in Healthcare (2CR)
4	RESP 09403 Pediatric & Neonatal Respiratory Care Lab (1CR)	HCM 51101 Introduction to Healthcare Management (3CR)
5	RESP 09400 Introduction to Clinical Research (3CR)	RESP 09435 Clinical Practice IV (3CR)
6	RESP 09425 Clinical Practice III (3CR)	RESP 09450 Senior Seminar (3CR)
	15 Total Semester Credits	17 Total Semester Credits

	DEGREE PROGRAM TOTAL CREDITS	**127-133**

1. Artistic Literacy (ARTL) and CMS 04205 Public Speaking are waived with an A.A. or A.S. degree per NJ Statewide Transfer Agreement. If a student did not get an A.A. or A.S. degree, they will take ARTL and CMS 04205 with Rowan.
2. There are multiple course options that satisfy both the Literature and Global Literacy requirements.