

Brookdale	The College of New Jersey				
Program Courses	Equivalent Course	Biomedical (Electrical Option)	Civil	Electrical	Mechanical
General Education (32 cr.)					
Required General Ed Courses					
ENGL 121 English Composition: The Writing Process (3 cr.)	WRI101	X	X	X	X
ENGL 122 English Composition: Writing & Research (3 cr.)	WRI102	X	X	X	X
Recommended General Ed Courses					
CHEM101 General Chemistry I (5 cr.)	CHE201	X	X	X	X
ECON106 Economics (3 cr.)(ECON107 being evaluated)	ECO 101	X	X	X	X
MATH171 Calculus I (4 cr.)	MAT127	X	X	X	X
PHYS121 General Physics I (4 cr.)	PHY201	X	X	X	X
PHYS122 General Physics II (4 cr.)	PHY202	X	X	X	X
Humanities (3 cr.) (ARTH105 REC.)	TST161	X	X	X	X
Humanities or Social Science (3 cr.) (HIST105 REC.)	LL HISTORY	X	X	X	X
Career Studies Courses (22 cr.)					
CADD121 Engineering Graphics w/CADD (3 cr.)	ENGI142	X	X	X	X
COMP137 Programming for Engineers (3 cr.)	CSC215	X	X	X	X
ENGI101 Engineering Mechanics I (3 cr.)	ENG222	X	X	X	X
ENGI105 Introduction to Engineering (1 cr.)	ENG095	X	X	X	X
MATH172 Calculus II (4 cr.)	MAT128	X	X	X	X
MATH273 Calculus III (4 cr.)	MAT229	X	X	X	X
MATH274 Elementary Differential Equations (4 cr.)	ENG272	X	X	X	X
Technical Electives					
CHEMICAL ENGINEERING (15 cr.)					
CHEM102 General Chemistry II (5 cr.)					
CHEM203 Organic Chemistry I (5 cr.)					
CHEM204 Organic Chemistry II (5 cr.)					
CIVIL/INDUST ENGINEERING (14 cr.)					
CHEM102 General Chemistry II (5 cr.)	CHE202		X		
ENGI102 Engineering Mechanics II (3 cr.)	ENG262		X		
ENGI 205 Strength of Materials (3 cr.)	MEC251		X		
ENGI206 Material Properties and Processes (3 cr.)	ENG152		X		
ELECTRICAL ENGINEERING (15 cr.)					
ENGI241 Properties of EE I (Circuits) (4 cr.)	ENGI212/214	X		X	
ENGI242 Properties of EE II (Electronics) (4 cr.)	ELC251/333	X		X	
ENGI251 Digital I (3 cr.)	ENG312	X		X	
ENGI252 Properties of EE III (Circuits) (4 cr.)	EC	X		X	
PHYS223 General Physics III (4 cr.)	EC	X		X	
MECHANICAL ENGINEERING (17)					
CHEM102 General Chemistry II (5 cr.)	CHE202				X
ENGI102 Engineering Mechanics II (3 cr.)	ENG262				X
ENGI 205 Strength of Materials (3 cr.)	MEC251				X
ENGI206 Material Properties and Processes (3 cr.)	ENG152				X
ENGI216 Kinematics & Dynamics of Machinery (3 cr.)	NOT REQUIRED				
Additional Courses Transferable to TCNJ					
CHEM102 General Chemistry II (5 cr.)	CHE202	X			
ENGI102 Engineering Mechanics II (3 cr.)	ENG262	X			
ENGI251 Digital I (3 cr.)	ENG312		X		X
HUM (PHIL 227)	IDS152	X	X	X	X
ENVR101	PHY120		X		
BIOL 101/102	BIOL185	X			