CASE SCHOOL OF ENGINEERING
CASE WESTERN RESERVE UNIVERSITY

Students must take the equivalent of the following courses at their liberal arts college before entering CWRU

General Requirements for Dual Degree Program		
Course	**Course Title**	**Semester Credit Hours**
MATH		
MATH 121	Calculus for Science & Engineering I	4
MATH 122	Calculus for Science & Engineering II	4
MATH 223	Calculus for Science & Engineering III	3
MATH 224	Elementary Differential Equations	3
CHEMISTRY		
CHEM 105	Principles of Chemistry I	3
CHEM 106	Principles of Chemistry II	3
CHEM 113	Principles of Chemistry Laboratory	2
PHYSICS		
PHYS 121	General Physics I-Mechanics	4
PHYS 122	General Physics II-Electricity and Magnetism	4
COMPUTER PROGRAMMING		
Students must take of the following:		
EECS 132	Introduction to Programming in Java	3

Sample Course Sequence for Computer Engineering

Year 1 Fall

Course	Course Title	Semester Credit Hours
EECS 281	Logic Design and Computer Organization	4
ENGL 398	Professional Communication for Engineers	2
ENGR 398	Professional Communication for Engineers	1
ENGR 210	Introduction to Circuits and Instrumentation	4
ECSE 233	Introduction to Data Structures	4
CSDS 302	Discrete Mathematics	3
		18

Year 1 Spring

Course	Course Title	Semester Credit Hours
ENGR 200	Statics and Strength of Materials	3
ECSE 301	Digital Logic Laboratory	2
ECSE 314	Computer Architecture	3
ECSE 315	Digital Systems Design	4
	Technical Elective	6
		18

Year 2 Fall

Course	Course Title	Semester Credit Hours
---	Statistics elective [c]	3
ENGR 225	Thermodynamics	4
	Technical Elective	6
	Technical Elective (or ECSE 318 VLSI/CAD) [b]	3
		16

Year 2 Spring

Course	Course Title	Semester Credit Hours
EECS 398	Engineering Projects I	4
ENGR 225	Thermodynamics, Fluid Dynamics, Heat and Mass Transfer	4
	Technical Elective	3
	Technical Elective	3
		14

Note: *The course sequence serves as an example of the classes necessary to complete the Dual Degree Program. Courses and the semesters taken will be based on the student's transfer credit and discussion with the Case Western Reserve University faculty advisor.*

** **Technical Elective Requirement***
Technical electives are more generally defined as any course related to the principles and practice of computer engineering. This includes all ECSE courses at the 200 level and above, and can include courses from other programs. All non-ECSE technical electives must be approved by the student's advisor.

** b The student must take ECSE 303 Embedded Systems Design and Laboratory, ECSE 318 VLSI/CAD, or another three credit hour technical elective.*

** c Chosen from: STAT 312 Basic Statistics for Engineering and Science, STAT 313 Statistics for Experimenters, STAT 332 Statistics for Signal Processing, STAT 333 Uncertainty in Engineering and Science*