

DUAL DEGREE AGREEMENT

STUDENT

STUDENT I.D.

EXPECTED GRADUATION DATE

COMPUTER SCIENCE

212

PRIMARY DEGREE

TOTAL CREDITS

ELECTRICAL ENGINEERING

SECONDARY DEGREE

APPROVAL GRANTED:

STUDENT

DATE

PRIMARY DEGREE DEPARTMENT

DATE

SECONDARY DEGREE DEPARTMENT

DATE

Computer Science & Electrical Engineering Dual Degree Program					
Area	Course	Title	Term	Grade	Credits
MATHEMATICS					
	MATH-101	Calculus I			4
	MATH-102	Calculus II			4
	MATH-203	Multivariate Calculus			4
	MATH-204	Differential Equations			4
	MATH-307	Matrix Algebra			4
	MATH-408	Probability and Statistics			4
Total (MATH)					24
BASIC SCIENCE					
	CHEM-135	Principles of Chemistry			4
	PHYS-114/115	Newtonian Mechanics			4
	PHYS-224/225	Electricity and Magnetism			4
		Science Elective ¹			4
Total (SCIENCE)					16
LIBERAL STUDIES					
	COMM-101	Written and Oral Communication I			4
	SSCI-201	Introduction to Social Science			4
	HUMN-201	Introduction to Humanities			4
	ECON-201	Economic Principles			4
	COMM-301	Written and Oral Communication II			4
	LS-489	Senior Seminar			4
		Advanced Humanities Elective			4
		Advanced Social Science Elective			4
		LS Elective			4
		LS Elective			4
Total (LIBERAL STUDIES)					40
COMPUTER SCIENCE CORE					
	CS-101	Computing and Algorithms I			4
	CS-102	Computing and Algorithms II			4
	CS-202	Systems Programming			4
	CS-203	Computing and Algorithms III			4
	CS-211	Discrete Mathematics			4
	CS-312	Theory of Computation			4
	CS-431	Compiler Design and Construction			4
	CS-451	Operating Systems			4
	CS-461	Database Systems			4
	CS-471	Software Engineering			4
	CE-422	Computer Architecture ²			4
	CE-480	Computer Networks			4
Total (CS CORE)					48

Area	Course	Title	Term	Grade	Credits
CS TECHNICAL ELECTIVES					
	Elective				4
	Elective				4
	Elective				4
Total (CS Technical Electives)					12
ENGINEERING CORE					
	IME-100	Interdisciplinary Desgin & Mfg			4
	MECH-210	Mechanics I			4
Total (ENGINEERING)					8
ELECTRICAL ENGINEERING CORE					
	EE-210/211	Circuits I & Lab			4
	CE-210/211	Digital Systems I & Lab ³			4
	EE-240	Electromagnetic Fields			4
	EE-310	Circuits II			4
	EE 320/321	Electronics I & Lab			4
	CE-320	Microcomputers I ³			4
	EE-332	Signals and Systems			4
	EE-490	Senior EE Design			4
Total (EE CORE)					32
EE TECHNICAL ELECTIVES⁴					
	EE	Electrical Engineering Elective			4
	EE	Electrical Engineering Elective			4
	EE	Electrical Engineering Elective			4
	EE	Electrical Engineering Elective			4
	EE	Electrical Engineering Elective			4
	EE	Electrical Engineering Elective			4
	EE	Electrical Engineering Elective			4
Total (EE Electives)					28
Thesis					4
Total CS/EE Dual Degree (188 Credits Minimum)					212

¹May be any course with a CHEM, PHYS, or BIOL prefix except CHEM-171.

²Engineering Elective for EE Program.

³CS core requirement.

⁴The Electrical Engineering Electives must include at least two EE-4xx or EE-5xx level courses.

Representative Program

Term	Course 1	Course 2	Course 3	Course 4	Course 5
Fr I	Interdisciplinary Design & Man. (IME-100)	Calculus I (Math-101)	Principles of Chemistry (CHEM-135/136)	Written & Oral Comm. I (COMM-101)	
Fr II	Computing & Algorithms I (CS-101)	Calculus II (MATH-102)	Newtonian Mechanics (PHYS-114/115)	Intro. to Humanities (HUMN-201)	
So I	Computing & Algorithms II (CS-102)	Multivariate Calculus (MATH-203)	Electricity & Magnetism (PHYS-224/225)	Discrete Mathematics (CS-211)	
So II	Computing & Algorithms III (CS-203)	Differential Equations (MATH-204)	Digital Systems (CE-210)	Circuits I (EE-210/211)	Intro. to Soc. Sci. (SSCI-201)
Jr I	Theory of Computation (CS-312)	Mechanics I (MECH-210)	Micro-Computers I (CE-320)	Circuits II (EE-310)	Economic Principles (ECON-201)
Jr II	Systems Prog. Concepts (CS-202)	Electromagnetic Fields (EE-240)	Computer Architecture (CE-422)	Electronics I (EE-320/321)	Advanced Hum. Elec.
Sr I	Database Systems (CS-461)	EE Technical Elective	Signals & Systems (EE-332)	Written & Oral Comm. II (COMM-301)	Advanced Soc. Sci. Elec.
Sr II	Compiler Design & Const. I (CS-431)	Probability & Stats. (MATH-408)	CS Technical Elective	EE Technical Elective	Science Elective
Sr III	Operating Systems (CS-451)	Matrix Algebra (MATH-307)	Computer Networks (CE-480)	EE Technical Elective	Senior Seminar LS-489
Sr IV	Software Engineering (CS-471)	CS Technical Elective	EE Technical Elective	EE Technical Elective	LS Elective
Sr V	CS Technical Elective	Senior EE Design Proj. (EE-490)	EE Technical Elective	EE Technical Elective	LS Elective