2009-2010 RIT BS/MS Program in Electrical Engineering with Computer Option (Final Release VJA 6/30/2009)

Standard first two years in Electrical Engineering or CE option equals 100 credit hours. Must have better than a 3.4 GPA

*Credit count will vary depending on the program option selected

Year One and Two				Year Three			Year Four				Year Five				
Microcomp 0301-365* (4) S	Physics III 1017-313 (4) F,W,S	J	Mult V Calc IV Math 305	F F	Cmplx Var 1016-420 (4) F,W		A	Prob & Stats for Eng 1016-3XX (4)F,W,S	L	Comm 0301-534 (4) S, Su	D,E	Mechatron 0301-531* (4) F,W,S	Grad Elec 0301-7xx (4)	Grad Elec 0301-7xx (4)	
			Calc III (PB) Math 283	A B,J	E&M Fields I 0301-473 (4) F,W	E&M Fields II 0301-474* (5) S, Su	I D	CompArch 0301-347* (4)F,W		Prof Elec 0301-6xx (4)		Grad Elec 0301-7xx (4)	Grad Elec 0301-7xx (4)	Grad Elec 0301-7xx (4)	Grad Elec 0301-7xx (4)
			Engr Math Math 328	B CO-OP B,G, J	Linear Sys I 0301-453 (4) F,W	L CO-OP Linear Sys II 0301-554 (4) S,Su	CO-OP E	Op Sys 4003-440 (4) All		Matrix Methods 0301-703 (4)F,W	O	uSoftwa I 0301-655 (4) S	CO-OP	Thesis 0301-890 (1)	Thesis 0301-890 (2)	Thesis 0301-890 (2)	Thesis 0301-890 (4)
			Ckts I W/Lab EE 381	H H	Electronics I 0301-481* (4) F,W	G Electronics II 0301-482* (4) S,Su		Digital Elec 0301-545* (4) F,W		Prof Elec 0301-6xx (4)	E	Control Sys 0301-514* (5)W,S,Su		Sr. Design I 0301-697 (4) F,W		Sr Design II 0301-698 (4) W,S	
			Restr Sci Elective (4) See Below			Lib A Conc 05XX-nnn (4)		Individual Design Exp. 0301-497 (3) F,W,S					Lib A Conc 05XX-nnn (4)	Lib A Conc 05XX-nnn (4)		
100				16		17	15			16		17	17	14	14	4	230 Total Credits

Legend

- Math
- Physics
- Chemistry
- Liberal Arts
- Elect Engr
- Free Elect
- Comp Science
- **Res Science**

Course Name
Course #
(Cr) Quarters-
* Indicates lab included

Prerequisites
Definitions

A

Course
Prerequisites

A

Prerequisite

Professional Electives:

Professional Electives from other departments can be taken with approval of Faculty Advisor.

Graduate Paper Option
Students who choose to complete the Graduate Paper Option should take an additional graduate course.

Senior Design Project
0301-697 and 698 are required. Senior Design Project may be undertaken in any of the interest areas.

Profession Electives — **12 Quarter Credits**
Three 600- or 700- level Electrical Engineering Courses

Graduate Electives — **20 Quarter Credits**
Five 700-level Electrical Engineering Courses.

Elective Focus Areas
Professional and Graduate Electives may be taken from the following focus areas:

1) Control Systems
2) Communications
3) Device and Intergrated Circuits
4) Digital and Computer Systems
5) Electromagnetic Fields & Optics
6) MEMS
7) Signal Processing

Random Signals & Noise is a Required Course for Focus Areas #1, 2, 6, and 7.

Restricted Science Electives

1017-314 Modern Physics
0301-370 Nano-Science, Engr. & Tech (S)

Cooperative Work Experience: — **PE Activities (2)**
Four Coop quarters distributed as suggested

Liberal Arts Core — **24 Quarter Credits**

Social Science Courses
Choose two courses, one from each of two different areas:

1) 0514-210 Intro to Psychology
2) 0511-211 Principles of Microeconomics
3) 0513-211 American Politics OR
   0513-214 Intro to International Relations
4) 0515-210 Foundations of Sociology
5) 0510-210 Cultural Anthropology

Humanities Courses
Choose two courses, one from each of two different areas:

1) 0507-301 American History
   0507-302 Modern European History
   0507-305 Special Topics History
   0507-306 Special Topics European History
2) 0505-213 Visual Arts
   0505-214 Musical Arts
   0505-215 Film Arts
   0505-216 Theater Arts
3) 0509-210 Intro. To Philosophy
   0509-211 Ethics
   0509-213 Critical Thinking
   0509-217 Ethics in the Info Age
4) 0504-210 Literary & Cultural Studies
   0508-211 Science, Tech & Values
   0508-212 Intro to Environmental Studies

Liberal Arts Concentration
12 Quarter Credits