

ECE - RF Communications Track

Non-MECOP Plan

Revised: 07/08/2008

Track Description

RF Communications deals with how radio signals are generated at one place, transmitted through the radio channel, received, and processed to recover the original information signal at another place. It also covers the associated devices/circuits and components to realize these transmission and reception functions. This is one of the most important aspects of modern wireless communication systems and networks such as mobile cellular phone networks, wireless internet access, audio broadcast, and television. The courses in this track train students on radio transmission principles, communications and signal processing theories, and radio system and network architecture. In this information era, information technology has become the most critical area and has the most significant impact on the daily life of human beings.

	Fall	Winter	Spring	Summer
Freshman	MTH 251*	4 MTH 252*	4 MTH 254*	
	ECE 111	3 ECE 112*	3 CS 161	
	CH 201*	3 MTH 231	4 ECE 271	
	WR 121*	3 Perspective	3 ECE 272	
		3 Lifetime Fitness	3 PH 211*	
	Total 13	Total 17	Total 16	Total 0
Sophomore	MTH 256*	4 MTH 306*	4 MTH 255	
	PH 212*	4 PH 213*	4 WR 327	
	ENGR 201*	3 ENGR 202*	3 ENGR 203	
	COMM 111/114*	3 CS 162	4 CS 261	
			<i>Apply to Pro</i>	
	Total 14	Total 15	Total 14	Total 0
Junior	ECE 375	4 ECE 322	4 ECE 323	
	ECE 351	3 ECE 352	4 ECE 353	
	ECE 390	4 ECE 391	4 CS 372	
	Bio+Lab	4 Perspective	3 ENGR 390	
		Total 15	Total 15	Total 14
Senior	ECE 441	2 ECE 442	2 ECE 443	
	ECE 461	4 ECE 462	4 ECE 463	
	<i>ECE 422/473/482</i>	4 <i>ECE 423/464/474</i>	4 <i>ECE 483/484/485</i>	
	DPD	3 Synthesis	3 <i>Restricted Elective</i>	
	Perspective	3 Perspective	3 Synthesis	
	Total 16	Total 16	Total 15	Total 0

Total Credits: 180

MECOP Plan

	Fall	Winter	Spring	Summer
Freshman	MTH 251*	4 MTH 252*	4 MTH 254*	
	ECE 111	3 ECE 112*	3 CS 161	
	CH 201*	3 MTH 231	4 ECE 271	
	WR 121*	3 Perspective	3 ECE 272	
		3 Lifetime Fitness	3 PH 211*	
	Total 13	Total 17	Total 16	Total 0
Sophomore	MTH 256*	4 MTH 306*	4 MTH 255	
	PH 212*	4 PH 213*	4 WR 327	
	ENGR 201*	3 ENGR 202*	3 ENGR 203	
	COMM 111/114*	3 CS 162	4 CS 261	
			<i>Apply to Pro & MECOP</i>	
	Total 14	Total 15	Total 14	Total 0
Junior	ECE 375	4 ECE 322		
	ECE 351	3 ECE 352		
	ENGR 390	3 ECE 353	MECOP Internship	MECOP Internship
	ENGR 407	1 ECE 391		
	ECE 390	4		
	Total 15	Total 15		
Senior 1	ECE 441	2 ECE 442	2 ECE 443	
	ECE 323	4 ECE/CS 372	4 ECE 463/*485	
	ECE 461	4 ECE 462	4 <i>ECE 483/484/485</i>	
	<i>ECE 422/473/482</i>	4 <i>ECE 423/464/474</i>	4 DPD	MECOP Internship
	ENGR 407	1 Perspective	3 Perspective	
	Total 15	Total 17	Total 16	
Senior 2		<i>Restricted Elective</i>	2	
	MECOP Internship	Bi+Lab	4	
		Perspective	3	
		Synthesis	3	
		Synthesis	3	
	Total 15			

Total Credits: 182

Employment

Employment opportunities encompass a variety of sections from telecommunication companies and research organizations, integrated radio system design, and wireless mobile and indoor services

Track Specific Courses

(#) = number of credits
Required (16)
ECE 390
ECE 461
ECE 462
***ECE 463/464**

Restricted Electives (14);
Select at least three
courses from:

ECE 422 *ECE 474*
ECE 423 *ECE 482*
ECE 463 *ECE 483*
ECE 464 *ECE 484*
ECE 473 *ECE 485*

* One of the following courses is required (ECE 463 or ECE 464)

Bolded courses in Freshman and Sophomore years should be completed prior to beginning the professional program

Bolded and Italicized courses should be completed prior to first MECOP internship