

## Guidelines for Students Enrolling in the Non-Degree Conferring Program in Radio Engineering

Approved by a meeting of the Department of Electrical Engineering Curriculum Committee and a meeting of the Academic Committee on May 4, 2006

Approved by a meeting of the College of Electrical Engineering and Computer Science Curriculum Committee on May 19, 2006

Approved by a meeting of the National Central University Curriculum Committee on May 29, 2006

Approved by a meeting of the Academic Affairs Committee on June 14, 2006

Amended and approved by a meeting of the Department of Electrical Engineering Curriculum Committee and a meeting of the Academic Committee on April 3, 2007

Amended and approved by a meeting of the College of Electrical Engineering and Computer Science Curriculum Committee on May 14, 2007

Amended and approved by a meeting of the National Central University Curriculum Committee on May 31, 2007

Amended and approved by a meeting of the Academic Affairs Committee on June 13, 2007

1. The aim of this program is to integrate courses relating to electromagnetic wave engineering, wireless communication and remote sensing, and thereby enhance the student's basic understanding of the radio frequency system framework.
2. Students studying in any college in the University may apply for entry into this program.
3. University students will be regarded as having completed this program after complying with these guidelines to earn 30 or more course credit hours from the program curriculum. They shall have the name of the program as well as the number of credit hours earned clearly indicated on their transcript and shall also be awarded a certificate of completion.
4. The requirements for this program's courses are as follows:

Category	Course Title	Credit Hours	Course Codes	Remarks
Basic Courses	Engineering Mathematics I	3	EE1001 / CO1003	Any five from this category.
	Engineering Mathematics II	3	EE2003 / CO2007	
	Engineering Mathematics III	3	EE2012 / CO2008	
	Electronics I	3	EE2001 / CO2005	
	Electronics II	3	EE2009/CO2006	
	Electronics III	3	EE3001	
	Circuit Theory I	3	EE2002 / CO2001	
	Circuit Theory II	3	EE2011 / CO2002	
	Electromagnetics I	3	EE2004 / CO2003	
	Electromagnetics II	3	EE2015 / CO2004	
System Concept Course	Microwave Engineering	3	EE3038	Any three from
	Introduction to Microwave System	3	EE4034	
	Electromagnetic Wave Experiment	3	EE4036	

	Signals and Systems	3	CO3004 / EE3009	this category.
	Probability	3	CO3003 / EE4020	
	Principles of Communication I/ Principles of Communication (Any one of the two)	3	CO3007 / EE3004	
	Principles of Communication II/ Communication System (Any one of the two)	3	CO3008 / EE4013	
	Introduction to Antenna Engineering	3	EE4038	
Advanced Courses	Electromagnetic Theory	3	EE5009	Any one from this category.
	Microwave Circuit	3	EE8026	
	Antenna	3	EE5006	
	Digital Communication	3	CO6019	
	Remote Sensing Theory	3	EE8044	

Category		Course Title	Credit Hours	Course Codes	Remarks
Professional Courses	Electro-magnetic Wave Engineering	Microwave and Millimeterwave Frequency Synthesizer	3	EE8053	Any one from this category.
		Microwave Integrated Circuit	3	EE8014	
		Computational Electromagnetics	3	EE8028	
		Microwave Filter Design	3	EE8042	
	Radar Ranging	Electromagnetic Scattering	3	EE8038	
		Radiometer and Remote Sensing	3	EE8057	
		Electrical Wave Propagation	3	EE8046 / CO6009	
	Wireless Communication	Code-Division Multiple Access Cellular Communication System	3	CO6008	
		Software Defined Radio	3	CO6039	
		Space-time Code	3	CO7001	
		Digital Transmission System Design	3	CO6014	

5. Whether courses with similar titles and content taken in other University programs can be accepted in lieu of courses offered by this program shall be left to the discretion of the Department of Electrical Engineering.
6. These guidelines shall be implemented and entered into force upon approval by a meeting of the Academic Affairs Committee. The same procedure applies to any amendment of these guidelines.