

SCHOOL OF ENGINEERING			
Degree: MASTER OF SCIENCE Credits: 30		CURRICULUM August 2018 1. Thesis; 2. Network Design Project; 3. Courses only, comprehensive exam	
Program: TELECOMMUNICATIONS AND NETWORKS SYSTEMS ADMINISTRATION			
Description: The program provides students with an in-depth knowledge of the principles of a Converged Networks including design, implementation, security and management with a strong hands-on approach.			
Course Code	Course Title	Credits	Requisites
Required Courses (21 crs)			
TCOM 500	Applied Mathematics in Telecommunications (admission req.)	3	Calculus I
TCOM 513	IT Project Management	3	Admission to program
TCOM 503	Introduction to TCP/IP	3	Admission to Program
CYBR 501	Network Security I	3	
CYBR 502	Computer Security I	3	
TCOM 514	Telecommunications Governance I	3	TCOM 513
TCOM 606 or TCOM 609	Network Design Project Thesis II	3	Permission of Project Advisor
Elective Courses (9 crs) (Select one area)			
Telecommunication (9 crs)			
TCOM 508	Implementation of Data Networks	3	
TCOM 509	Protocol Analysis	3	TCOM 503
TCOM 507	Convergence of Technologies	3	TCOM 503
Internet (9 crs)			
TCOM 511	Internet Technologies	3	TCOM 503
TCOM 512	Internetworking Devices	3	TCOM 511
TCOM 521	Networking Fundamentals (Antes: Introduction to Networking)	3	As required by advisor
TCOM 556	IP Tel & Design and Implementation of Voice Networks	3	TCOM 503
TCOM 523	Wireless Networks	3	TCOM 503
Network Securities (9 crs)			
CYBR 521	Network Security II (Antes Telecommunications Governance II)	3	CYBER 501
CYBR 522	Computer Security II	3	CYBER 502
CYBR 600	Cyber Security Forensics	3	CYBER 502
Telecommunications Governance & Auditing (9 crs)			
TCOM 515	Telecommunications Governance II	3	TCOM 514
TCOM 522	Telecommunications Management and Policy	3	TCOM 5113
TCOM 524	Technological & Scientific Innovation	3	

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Program: TELECOMMUNICATIONS AND NETWORKS SYSTEMS ADMINISTRATION			
Course Code	Course Title	Credits	Requisites
FIRST YEAR – FIRST SEMESTER			
TCOM 500	Applied Mathematics in Telecommunications (admission req.)	3	Calculus I
TCOM 513	IT Project Management	3	Admission to program
TCOM 503	Introduction to TCP / IP	3	Admission to Program
CYBR 501	Network Security I	3	
		9	
FIRST YEAR – SECOND SEMESTER			
Elective	Elective I	3	TCOM 503
CYBR 502	Computer Security I	3	
TCOM 514	Telecommunications Governance I	3	TCOM 513
		9	
SECOND YEAR – FIRST SEMESTER			
Elective	Elective II	3	TCOM 503
Elective	Elective III or Thesis I (TCOM 607)	3	Advisor Approval
	Elective III or IV	3	
		9	
* SECOND YEAR - SECOND SEMESTER			
TCOM 606	Network Design Project	3	ADVISOR APPROVAL
TCOM 609	Thesis II	3	
	Comprehensive Examination (classes only, must take elective IV)		
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