

GEORGE IN IVERSITY

Volgenau School of Engineering

Where Innovation Is Tradition

About the MS in Telecommunications

Admission Requirements

The Masters of Science in Telecommunication at George Mason University offers a blend of cutten-edge practice-oriented courses in network engineering, cloud computing, wireless communications (e.g. 5G), and cyber security. This industry-oriented program is designed for students who wish to enter the field of networkengineering or are working in the field and want to advance their knowledge.

The program concentrates on practical applications of network engineering, rather than on a theoretical approach, while providing a thorough education in the necessary engineering principles. Hands-on laboratory courses provide students with practical skills and knowledge needed to hit the ground running after graduation.

Applications for the graduate program in Telecommunications must hold a Bachelors's degree from an accredited college or university in engineering, math, science, computer science, bussiness (with a quantitative background), economics, or other analytical disciplines, and students who have equivalent work experience indicating analytical aptitude.

Depending on background, some applicants may be required to complete 3 to 6 credits of preliminary coursework.

A GPA of 3.00 is usually required.



Master of Science in Telecommunications

George Mason University 4400 University Drive Fairfax, VA 22030



Graduate Degree and Certificate Program

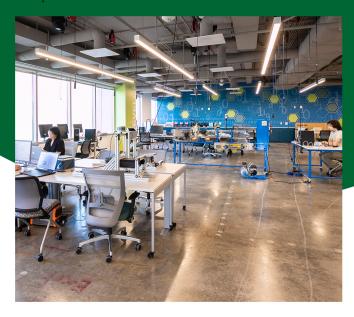
The Masters of Science in Telecommunications requires the completion of 30 credit hours of approved graduate course work.

Additionally, following graduate certificate program are available which requires the completion of 15 credit hours of course work.

- Certificate in Advanced Networking Protocals for Telecommunications
- Certificate in Telecommunications Forensics and Security

Degree Requirments:

Students must complete 30 graduate credits consisting of a 21-credit required core component and a 9-credit elective component.







The MS in Telecommunications is a technical degree program that is accessible to students with technical or non-technical backgrounds.

Core Comp	onent (21 credits)	
TCOM 500	Modern Telecommunications	
TCOM 514	Basic Switching: Lecture and Laboratory Course	
TCOM 515	Internet Protocol Routing: Lecture and	
	Laboratory Course	
TCOM 535	The TCP/IP Suite of Internet Protocols	
TCOM 570	Network Automation	
TCOM 610	Border Gateway Protocol (BGP) Routing	
TCOM 750	Coordinating Seminar	
Concentrat	ion: Network Technologies (NTEC)	
Select 3 co	urses from the following:	
TCOM 611	Multi-Protocol Label Switching (MPLS)	
TCOM 614	Advanced Routing Lab	
TCOM 616	Cloud Network Technologies	
TCOM 617	Enterprise Network Architecture	
TCOM 631	Voice Over IP	
	ion: Network Forensics and Security (NFSC)	
Select 3 courses from the following:		
TCOM 660	Network Forensics	
TCOM 661	Digital Media Forensics	
TCOM 663	Operations of Intrusion Detection for Forensics	

TCOM 554 Incident Response Forensics

Select 3 courses from the following: TCOM 551 Digital Communication Systems TCOM 607 Satellite Communications

Concentration: Space Communication Systems

	ECE 580	Small Spacecraft Engineering
	ECE 660	Space System Engineering
	Electives (9 Credits)
	TCOM 551	Digital Communication Systems
	TCOM 552	Introduction to Mobile Communications System
	TCOM 607	Satellite Communications
	TCOM 608	Optical Communications Systems
	TCOM 611	Multi-Protocol Label Switching (MPLS)
	TCOM 614	Advanced Routing Lab
	TCOM 616	Cloud Network Technologies
	TCOM 617	Enterprise Network Architecture
	TCOM 631	Voice Over IP
	TCOM 652	5G Service, Technology and Network
	TCOM 660	Network Forensics
	TCOM 661	Digital Media Forensics
C)	TCOM 662	Advanced Secure Networking
-)	TCOM 663	Operations of Intrusion Detection for Forensic
	TCOM 664	Incident Response Forensics
	TCOM 590	Selected Topics in Telecommunications
	TCOM 690	Advanced Topics in Telecommunications
	ECE 532	Secure Wireless Communications and Network
	ECE 542	Computer Network Architectures and Protocol
	ECE 552	Big Data Technologies
	ECE 643	Network Switching and Routing