

**University of Pittsburgh School of Information Sciences  
Graduate Telecommunications and Networking Program  
MST PLAN OF STUDIES (37 credits required)**

*For those enrolled in Fall 2012 or later*

Student Name \_\_\_\_\_

Student ID \_\_\_\_\_

Undergraduate Major \_\_\_\_\_

Expected MST Graduation Date \_\_\_\_\_

Phone (day) \_\_\_\_\_

Phone (evening) \_\_\_\_\_

Full-Time Student [ ] Part-Time [ ] Available for classes in the Morning [ ] Afternoon [ ] Evening [ ]

**Prerequisites (not included in the 37 credits required for this degree program)**

Course	Date taken	Grade
Calculus		
Probability		
Programming		
Intro to Telecommunications (TELCOM 2000)		

COURSES (3 credits unless otherwise specified)	PREREQUISITES	DATE PLANNED	DATE COMPLETED
<b>Required Courses (22 credits)</b>			
INFSCI 1071 Applications of Networks *	INFSCI 0010, INFSCI 0017, INFSCI 1070		
TELCOM 2120 Network Performance			
TELCOM 2100 Fundamentals of Telecommunications			
TELCOM 2321 Wide Area Networks	Prerequisites: TELCOM 2310; Corequisites: TELCOM 2120		
TELCOM 2011 Telecommunications Seminar (1 credit)			
TELCOM 2700 Wireless Networks			
TELCOM 2010 Computer Networking Laboratory			
TELCOM 2810 Information Security and Privacy			
<b>Management &amp; Policy Group (3 credits required)</b>			
BUSBIS1630 Project Management+			
BMIS 2051 Project Management			
<b>Suggested Electives (12 credits) **</b>			
<i>Networking</i>			
TELCOM 2215 Unified Communications			
TELCOM 2125 Network Science			
TELCOM 2721 Mobile Data, Ad Hoc and Sensor Networks			
INFSCI 2550 Client-Server Systems	INFSCI 2500		
INFSCI 2560 Web Technologies and Standards			
INFSCI 2710 Database Management	INFSCI 2500		
INFSCI 2711 Advanced Topics in Database Management	INFSCI 2710		
<i>Wireless and Mobile</i>			
TELCOM 2710 Foundations of Wireless	TELCOM 2210		
TELCOM 2720 Cellular and Wireless Networks	TELCOM 2210		
TELCOM 2721 Mobile Computing	TELCOM 2210		
TELCOM 2727 Application Development for Mobile Devices	TELCOM 2700		
INFSCI 2801 Geospatial Information Systems			
INFSCI 2802 Mobile GIS and Location Based Services	INFSCI 2801		
<i>Security</i>			
TELCOM 2813 Security Management	TELCOM 2810/2821 or INFSCI 2150		

TELCOM 2820 Cryptography	TELCOM 2000/2100 or INFSCI 1070		
TELCOM 2821 Network Security	TELCOM 2000/2100 or INFSCI 1070, TELCOM 2810/20 or INFSCI 2150		
INFSCI 2620 Developing Secure Systems	INFSCI 2150		
TELCOM 2825 Info Sys & Network Infrastructure Protection	TELCOM 2000/2100/ 2810 or INFSCI 1070 or INSCI 2150		
INFSCI 2731 Security in E-Commerce	TELCOM 2810, INFSCI 2560		
INFSCI 2729 Capstone in Security	INFSCI 2150/TELCOM 2810, 2821		
<i>Other Preapproved Electives in School of Information Sciences</i>			
INFSCI 2140 Information Storage and Retrieval			
TELCOM 2515 Information Ethics			
INFSCI 2160 Data Mining			
INFSCI 2300 Human Information Processing			
INFSCI 2470 Interactive System Design	INFSCI 2300, INFSCI 2710		
INFSCI 2430 Social Computing			
TELCOM 2512 Information Policy			
INFSCI 2540 Software Engineering			
<i>Preapproved Electives, University of Pittsburgh</i>			
BUSMIS 2537 Business System Platforms			
BUSMIS 2586 IS Planning			
ECE 1710 Power Distribution Systems Engineering and Smart Grids			
ECE 2521 Analysis of Stochastic Processes			
ECE 2523 Digital Signal Processing			
ECE 2671 Optimization Methods			
ECE 3524 Digital Speech Processing			
ECE 3422 Information Theory			
CS 2310 Software Engineering			
CS 3350 Modeling and Simulation			
CS 2750 Machine Learning			
CS 2530 Computer and Network Security			
<i>Independent Study – must have advisor’s permission</i>			
TELCOM 2921 in Networking			
TELCOM 2922 in Communication Systems			
TELCOM 2923 in Computer Communications			
TELCOM 2924 in Telecom Administration			
TELCOM 2925 in Telecom Economics & Policy			
TELCOM 2926 in Human Communications			
TELCOM 2927 in Wireless Networks			
TELCOM 2928 in Security			
<i>Special Topics – must have advisor’s permission</i>			
TELCOM 2931 in Networking			
TELCOM 2932 in Communication Systems			
TELCOM 2933 in Computer Communications			
TELCOM 2934 in Telecom Administration			
TELCOM 2935 in Telecom Economics & Policy			
TELCOM 2936 in Human Communications			
TELCOM 2937 in Wireless Communications			
TELCOM 2938 in Telecommunications Security			
<i>Practical Experience – must have advisor’s permission</i>			
TELCOM 2940 Practicum			
TELCOM 2941 Master’s Thesis			

\* May be replaced with elective course if student has taken an equivalent undergraduate Computer Networks Course equivalent to TELCOM 2310 Computer Networks

+ Students in the Security Track can substitute TELCOM 2813 Security Management for Project Management

\*\* Other electives may be chosen with permission of advisor. Students may take up to 6 credits of relevant graduate coursework offered by another accredited university.