The USC Master of Science in System Safety and Security (MSSYSS) program is designed to train leaders in industry and government to develop and evaluate systems that protect against natural disasters, accidents, and attacks by terrorists or criminals, and to identify the most economically effective means to improve the nation’s security. As a program participant, you will choose an area of concentration from either Systems or Cybersecurity to complete the MSSYSS degree. Both the Master of Science and Graduate Certificate are interdisciplinary, combining courses from the USC School of Policy, Planning and Development and the USC Viterbi School of Engineering.

The program is aligned with the research agenda of the newly created Center for Risk and Economic Analysis of Terrorism Events (CREATE), funded by the United States Department of Homeland Security (DHS). The MSSYSS program is designed to serve the educational needs of DHS and other federal, state and local agencies, as well as contractors serving government agencies. All courses required to earn this degree are available via the Distance Education Network (DEN).

:// USC Viterbi School of Engineering Points of Distinction

- **Top Ten in the Nation**
  U.S. News and World Report ranks USC #6 in the nation for best overall graduate programs in its 2005 rankings of the top schools of engineering.

- **Distinguished Faculty**
  With 23 faculty members elected to the National Academy of Engineering, and 40 others who have earned Presidential Early Career, Presidential Young Investigator or NSF/NIH Young Investigator awards, the school ranks among the nation’s very best in these important metrics of a school’s present and future strength.

- **Research Centers**
  USC Viterbi School of Engineering is home to the distinguished Information Sciences Institute (ISI), and Integrated Media Systems Center (IMSC), the only National Science Foundation-founded Engineering research center for multimedia and internet technology. With over $135 million in external funding support, the school is among the nation’s highest in volume of research activity.

- **Strong Alumni Network**
  With over 180,000 living members of the Trojan family, the USC alumni network is reputed to be one of the largest, most influential and loyal families one can ever be a part of.

:// How DEN Works

Courses are streamed live from studio classrooms on the USC campus and are made available on the DEN website, enabling you to access your classes live or on-demand. Live instruction is highly interactive — you can ask questions and hold discussions with the professor by telephone or threaded chat. E-mail, chat and threaded discussions can be used to communicate with professors, TAs and other students outside of class hours. In-class notes are made available on the DEN website for viewing and printing, so you can focus on the lecture rather than taking notes.

**Technical Requirements**

All you need is high-speed Internet connection [minimum: DSL or cable connection].

:// How to Enroll

Go to http://den.usc.edu and click on “Prospective Students” to begin the enrollment process or contact studentaffairs@den.usc.edu with any questions.

:// Contacts

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http://den.usc.edu
Benefits of the USC Distance Education Network [DEN]

As technology evolves at an increasingly rapid pace, it is becoming even more crucial for today’s engineers to remain at the forefront of their industry. Following are some of the benefits of earning your degree via the USC Viterbi School of Engineering Distance Education Network [DEN):

• Positive Work/Life Balance
  At USC, we realize that time is your most precious commodity and recognize the importance of maintaining a positive work/life balance. Our distance education network [DEN] is designed especially for engineering professionals like yourself who work full-time.

• Lectures Available Live and On-demand
  Classes are available for viewing live, and are also archived for the entire semester, giving you an opportunity to review complex lessons and prepare for exams.

• Secure Your Future
  Many engineers have found investing in a Master’s degree to be incredibly worthwhile. In addition to gaining more knowledge, you will be qualified for positions of greater responsibility, prestige, security and earning capacity.

• On-campus Attendance Not Required
  Most DEN students never set foot on the USC campus. Courses are viewed online, and homework assignments are transmitted via e-mail or fax. You can earn your graduate degree from a top-ranked university from the comfort of your home or office. Examinations are proctored at local testing centers, requiring only a minimal drive.

• Tuition Deferment
  The Viterbi School of Engineering assists students working in industry by deferring the “up front” payment of tuition and mandatory fees if their companies reimburse upon presentation of the final grade after the semester is over.

Application Criteria

Candidates for formal admission to the USC M.S. in System Safety and Security program and the Graduate Certificate require:

• Bachelor of Science degree in engineering or the sciences from a regionally-accredited institution with undergraduate coursework in engineering economy and statistics
• A minimum cumulative grade point average [GPA] of 3.0
• Satisfactory general GRE scores [minimum 650 quantitative, 400 verbal]
• Statement of purpose
• Admitted students who do not meet the coursework requirements will be assigned courses to complete the deficiencies.

GET STARTED NOW! If you meet the first two requirements above, you can get started as a Limited student before formally applying to the university. This option gives you time to prepare for the GRE exam and complete the admission application, while getting a head start on applicable coursework. Up to 12 units taken as a Limited student can be applied toward an advanced degree. Note: Limited Student status is not a guarantee of admission.

Graduation Requirements – MSSYSS

A total of 29 units is required to complete the Master of Science degree, including completion of five core courses, three course specializations and one additional elective. A minimum cumulative GPA of 3.0 is required for graduation. Additionally, all USC Viterbi School of Engineering general requirements for the Master of Science must be satisfied.

Prerequisites:
You must take the following courses or their equivalents either prior to enrolling in the program or as deficiency courses.

ISE 460* Engineering Economy 3
MATH 408 Mathematical Statistics 3
* If ISE 460 is taken as a prerequisite, it can be used to meet the Elective requirement.

Required Courses:
ISE 550 Engineering Management of Government-Funded Programs 3
ISE 561 Economic Analysis of Engineering Projects 3
ISE 562 Value and Decision Theory 3
PPD 501** Public Sector Economics 4
PPD 587** Risk Analysis 4
Total 17

** These courses are offered through DEN by the USC School of Policy, Planning & Development.

Area of Concentration:
You can choose from two areas of concentration – Cyber-Security and Systems. Three courses must be taken from your selected area.

Graduate Certificate in System Safety and Security

A total of 17 units (5 courses) are required to complete the Graduate Certificate. The same M.S. degree prerequisites apply to the Certificate program.

Required Core Courses:
ISE 550 Engineering Management of Government Funded Programs 3
ISE 561 Economic Analysis of Engineering Projects 3
ISE 562 Value and Decision Theory 3
PPD 501** Public Sector Economics 4
PPD 587** Risk Analysis 4
Total 17

** These courses are offered through DEN by the USC School of Policy, Planning & Development.

Please visit http://den.usc.edu/programs/sss for details on course descriptions, requirements and electives.