USC Viterbi School of Engineering

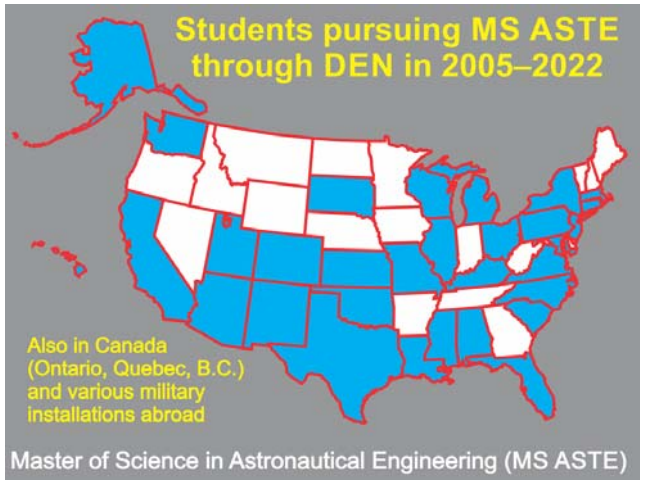
Master of Science in *Astronautical Engineering*

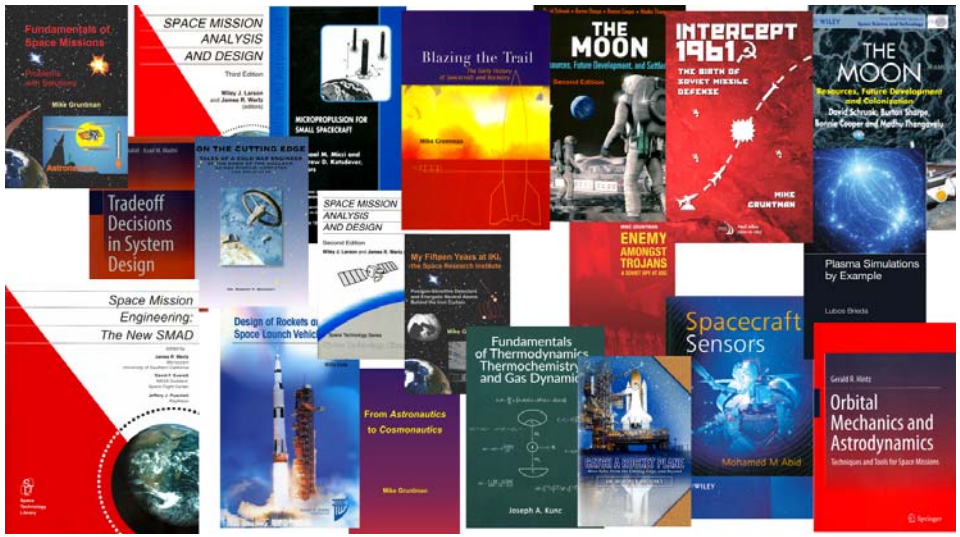
Neil Armstrong on USC campus

Department of Astronautical Engineering
Viterbi School of Engineering, USC

6 full-time faculty

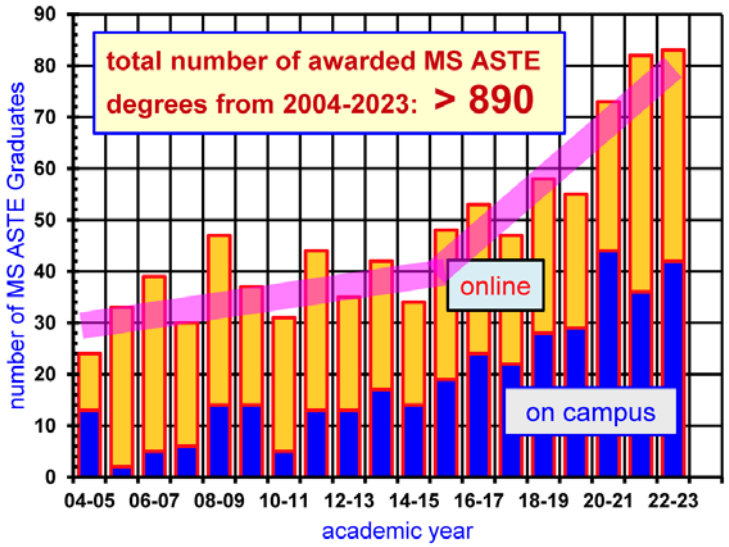
20+ adjunct faculty and part-time lecturers (specialists in leading space companies and government R&D centers)





Books by USC Astronautics faculty and instructors

USC/VSOE degrees awarded:
Master of Science in *Astronautical Engineering*



>890 MS ASTE degrees awarded from 2004–2023

https://viterbigradadmission.usc.edu/programs/masters/msprograms/astronautical-engineering/ms-astronautical-engineering/

Master of Science in Astronautical Engineering (MS ASTE)

MS ASTE: Astronautics Coursework

USC Viterbi School of Engineering

- Spacecraft System Design
- Space Environment and Spacecraft Interactions
- Design of Low Cost Space Missions
- Space Studio Architecting
- Entry and Landing Systems
- Orbital Mechanics I, II
- Space Navigation
- Solar System Navigation
- Spacecraft Attitude Dynamics
- Spacecraft Attitude Control
- Rocket and Spacecraft Propulsion
- Liquid Rocket Propulsion
- Solid Rocket Propulsion
- Advanced Spacecraft Propulsion
- Space Launch Vehicle Design
- Physical Gas Dynamics I, II
- Spacecraft Structural Dynamics
- Spacecraft Structural Strength&Mats

Continuously developing and introducing new coursework

leading specialists in space industry and gov't teach most specialized courses

- Spacecraft Thermal Control
- Spacecraft Power Systems
- Systems for Remote Sensing from Space
- Spacecraft Sensors
- Spacecraft Cryogenic Systems
- Ground Communications for Sat. Ops
- Safety of Space Systems and Missions
- Reliability of Space Systems
- Safety of Space Operations
- Human Spaceflight
- Human Factors in Spacecraft Operations
- Spacecraft Life Support Systems
- Plasma Dynamics I, II
- Computational Plasma Dynamics

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