USC Ming Hsieh Department of Electrical and Computer Engineering

1st Semester Course Recommendations

The following lists are recommended courses in the first semester by major/degree programs. The number in parentheses indicates the units per class.

**MSEE-General Degree Focus Areas Only**

- Communications: EE 450 (4), EE 503 (4), EE 510 (4)
- Computer Architecture: EE 450 (4), EE 457 (4), EE 477 (4), EE 451 (4)
- Computer Networks: EE 450 (4), EE 457 (4), EE 503 (4)
- Controls: EE 482 (3), EE 503 (4), EE 510 (4)
- Data Science: EE 503 (4), EE 510 (4), EE 483 (4)
- Electric Power Systems: EE 443 (4), EE 444 (4), SAE 515 (3)
- Electromagnetics, Optics, Photonics: EE 470 (3), EE 471 (4), EE 506 (4), EE 529 (4)
- Signal and Image Processing: EE 483 (4), EE 503 (4), EE 510 (4)
- VLSI (Digital): EE 457 (4), EE 477 (4)
- VLSI (Mixed-Signal): EE 479 (4), EE 504 (3), EE 508 (3), EE 537 (4)

**MSEE-Computer Architecture Degree**

EE 450 (4), EE 457 (4), EE 477 (4), EE 451 (4)

**MS-Computer Engineering (CENG) Degree**

EE 450 (4), EE 457 (4), EE 477 (4), EE 503 (4), EE 451 (4)

**MSEE-Computer Networks Degree**

EE 450 (4), EE 457 (4), EE 503 (4)

**MS in ECE-Machine Learning and Data Science Degree**

EE 483 (4), EE 503 (4), EE 510 (4)
MSEE-VLSI Design Degree
  EE 457 (4), EE 477 (4), EE 479 (4), EE 504 (3), EE 508 (3), EE 537 (4)

MSEE-Wireless Health Technology Degree
  EE 450 (4), EE 503 (4), MEDS 530a (4)

MSEE-Wireless Networks Degree
  EE 450 (4), EE 503 (4), EE 558 (3)

MS-Financial Engineering (MS-FINE) Degree
  EE 503 (4), EE 518 (4), GSBA 548 (3)

MS-Green Technologies Degree
  CE 469, (2), ENE 505 (4), CHE 510 (3), SAE 515 (3)

MS-Electrical Engineering/Engineering Management (EEMG) Dual Degree
  Follow the MSEE-general degree and ISE degree requirements per catalogue policy. Please contact your academic advisor for specific details.

Notes:
  • Full-time enrollment for MS students at USC is a minimum of 8.0 units (2-3 courses).
  • Placement Exams are available for the following courses: EE 450, EE 457, EE 477.
  • EE 590 and EE 598 are not allowed in your first semester.
  • Students enrolled in the MSEE-Wireless Networks degree program must pass the EE 450 placement exam or register for EE 450. Please note that if you register for EE 450, this course will not count toward your degree.
  • No CSCI courses in the 1st semester: As a first semester ECE graduate student, you would not be allowed to register in a CSCI course. No d-clearance would be granted to you. Only continuing ECE students (2nd semester or above) may request d-clearance from the CSCI Department.