CSE - COMPUTATIONAL SCIENCE AND ENGINEERING

CSE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CSE/)

Courses

CSE 198 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/198/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated up to 6 hours in the same semester and to a maximum of 9 hours in separate semesters.

CSE 298 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/298/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated up to 6 hours in the same semester and up to 9 hours in separate semesters.

CSE 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/398/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated up to 6 hours in the same semester and up to 9 hours in separate semesters.

CSE 401 Numerical Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/401/)
Same as CS 450, ECE 491 and MATH 450. See CS 450.

CSE 402 Parallel Progrmng: Sci & Engrg credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/402/)
Same as CS 420 and ECE 492. See CS 420.

CSE 408 Applied Parallel Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/408/)
Same as CS 483 and ECE 408. See ECE 408.

CSE 412 Numerical Thermo-Fluid Mechs credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/412/)
Same as ME 412. See ME 412.

CSE 414 Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/414/)
Same as CS 473 and MATH 473. See CS 473.

CSE 422 Computer System Organization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/422/)
Same as CS 433. See CS 433.

CSE 423 Operating Systems Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/423/)
Same as CS 423. See CS 423.

CSE 426 Software Engineering I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/426/)
Same as CS 427. See CS 427.

CSE 427 Interactive Computer Graphics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/427/)
Same as CS 418. See CS 418.

CSE 450 Computational Mechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/450/)
Same as TAM 470. See TAM 470.

CSE 451 Finite Element Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/451/)
Same as AE 420 and ME 471. See ME 471.

CSE 461 Computational Aerodynamics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/461/)
Same as AE 410. See AE 410.

CSE 485 Atomic Scale Simulations credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/485/)
Same as MSE 485 and PHYS 466. See MSE 485.

CSE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/498/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated for a maximum of 6 hours in the same semester and up to 9 hours in separate semesters.

CSE 505 Computational Bioengineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/505/)
Same as BIOE 505. See BIOE 505.

CSE 510 Numerical Methods for PDEs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/510/)
Same as CS 555 and MATH 552. See CS 555.

CSE 511 Iterative & Multigrid Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/511/)
Same as CS 556. See CS 556.

CSE 512 Parallel Numerical Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/512/)
Same as CS 554. See CS 554.

CSE 513 Topics in Numerical Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/513/)
Same as CS 558. See CS 558.

CSE 515 Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/515/)
Same as CS 573. See CS 573.

CSE 517 Adv Finite Element Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/517/)
Same as TAM 574. See TAM 574.
CSE 521  Computer Architecture  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/521/)
Same as ECE 511. See ECE 511.

CSE 522  Parallel Computer Architecture  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/522/)
Same as CS 533. See CS 533.

CSE 525  Computational Statistics  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/525/)
Same as STAT 525. See STAT 525.

CSE 527  Scientific Visualization  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/527/)
Same as CS 519. See CS 519.

CSE 530  Computational Electromagnetics  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/530/)
Same as ECE 540. See ECE 540.

CSE 532  Numerical Circuit Analysis  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/532/)
Same as ECE 552. See ECE 552.

CSE 542  Statistical Learning  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/542/)
Same as ASRM 551 and STAT 542. See STAT 542.

CSE 543  Topics in Image Processing  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/543/)
Same as ECE 547. See ECE 547.

CSE 551  Finite Element Methods  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/551/)
Same as CEE 570. See CEE 570.

CSE 552  Nonlinear Finite Elements  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/552/)
Same as CEE 576. See CEE 576.

CSE 553  Computational Inelasticity  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/553/)
Same as CEE 577. See CEE 577.

CSE 554  Computational Plates & Shells  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/554/)
Same as CEE 571. See CEE 571.

CSE 560  Computational Fluid Mechanics  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/550/)
Same as TAM 570. See TAM 570.

CSE 566  Numerical Fluid Dynamics  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/566/)
Same as ATMS 502. See ATMS 502.

CSE 576  Computational Chemical Biology  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/576/)
Same as BIOP 576 and CHEM 576. See CHEM 576.

CSE 598  Special Topics  credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/598/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 graduate hours. 1 to 4 professional hours. Approved for Letter and S/U grading. May be repeated for a maximum of 6 hours in the same semester and up to 9 hours in separate semesters.

Information listed in this catalog is current as of 06/2023