EDUCATIONAL COMMUNICATION AND TECHNOLOGY (EDCT-UE)

EDCT-UE 1010 Being Digital: How the Internet Works/Why It Is Important (4 Credits)
Typically offered occasionally
This course is designed to prepare digital-era students in all fields of study for professional achievement in a technologically sophisticated, global, networked environment. The course is structured around three central elements of "digital literacy" -- 1) human perception & cognition, 2) computers & electronic intelligence, & 2) the network architecture of the digital web. It is a rigorous intellectual introduction to the fundamental principles on which these technologies are based. There are no perquisites & those from the technologically challenged to the techno-geeks are welcome. Students will be introduced to the fundamentals of human attention, how sound waves, light waves & electromagnetic waves work & what computers and routers do. . This is a "flipped course" – what would normally be in-class lectures and demonstrations are available online as curricular modules & can be viewed at students' convenience (& reviewed as appropriate) much like traditional reading assignments. In-person class sections are used for dialog, discussion & Q & A with the instructor.
Grading: Ugrd Steinhardt Graded
Repeatable for additional credit: No

EDCT-UE 1041 Fundamentals of Information Technology & Artificial Intelligence (4 Credits)
Analysis of the exponential expansion of digital communication and computation and the resultant impact on social interaction, cultural creation, education and business enterprise. Key topics include: cyber security, artificial intelligence, machine learning, neural network architectures, natural language processing, viral information dynamics, block chain technologies, data mining and data analytics. No prerequisites.
Grading: Ugrd Steinhardt Graded
Repeatable for additional credit: No

EDCT-UE 1042 Creativity and Artificial Intelligence (4 Credits)
Typically offered Spring
Are modern generative AI systems capable of true creativity or are they simply stochastic parrots, unthinkingly repeating sequences in their training data? We begin with an examination of human creativity and the science of human cognition, followed by an accessible review of the inner workings of modern generative transformer models with a focus on pattern recognition and creative pattern expansion. The course concludes with group and individual projects applying new knowledge and skills to creative tasks.
Grading: Ugrd Steinhardt Graded
Repeatable for additional credit: No