

Computer Science Endorsement Courses

NLP 500 Introduction to Social Computing and Instructional Design for Educators

This graduate level survey course is designed to equip educators with the knowledge and skills essential for integrating computer science into their teaching practice. Focused on social computing and instructional design, this course explores the intersection of technology, education, and human interaction, providing a foundation for educators seeking licensure in computer science instruction.

INF 510 Integrating Coding in Education: Theory and Practice for Educators

This graduate level course is tailored for educators eager to enrich their teaching practices by incorporating coding into their classrooms. Participants will explore the theoretical foundations of coding education, gain hands on experience with Python, and develop effective strategies for teaching coding to diverse learners in K-12 settings. Participants will also gain hands on experience with industry relevant tools, and develop effective strategies for teaching web design to diverse learners in K-12 settings.

EDU 580 Integrating Design and Coding: Application of Computer Science in K-12 Classrooms

This course is designed to provide educators with the knowledge and skills necessary to apply the computer science endorsement program and applies it to instructional strategies that can be practiced in K-12 classrooms. Evidence based instructional practices related to computer science will be emphasized. A minimum of 50 hours of field experience in a K-12 setting is incorporated in this course to apply concepts learned throughout the program.

NLP 540 Integrating Data Analytics and AI in Education: Theory and Practice for Educators

This course is designed for educators seeking to enhance their data literacy and analytical skills, empowering them to leverage data driven insights in their own teaching practices and familiarize students with database basics. Participants will explore the fundamentals of data analysis, gain proficiency in SQL for database querying, and delve into the basics of AI powered data querying techniques.