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Utica College Bridge Courses – Fall 2021 (October 25 – December 17)

OPEN TO GRADES 10, 11 AND 12

CYB 201 - Introduction to Cyber Operations (3 credits)

This course provides introductory guidelines for cyber operations that include examining networks and data under attack, studying the operation of network protocols and services, and analyzing the network infrastructure. Students are introduced to methodologies and techniques used to prevent network access and attacks. Students investigate endpoint vulnerabilities and attacks while identifying network security alerts and analyzing network intrusions. Incident response models used to manage security incidents are discussed. Prerequisite(s); if any: CYB 107.

OPEN TO GRADES 11 AND 12

CSC 201 - Discrete Mathematics (4 credits)

First course in abstract mathematical structures with emphasis on material needed for applications to computer science. Introduction to different number systems, data types, computer arithmetic, Boolean algebra, direct and indirect proofs, and mathematical induction. Lecture and Recitation.

CYB 205 - Software Foundations for Cyber (3 credits)

Overview and exploration of software and technology foundations for cybersecurity and information assurance majors.

MAT 112 - Basic Statistics (3 credits)

For non-mathematics majors. Probability theory topics, binomial distribution, normal distribution, descriptive statistics, frequency distribution, measures of central tendency, hypothesis testing. Confidence intervals, correlation, and prediction. Prerequisite(s); if any: MAT 100, or satisfactory performance in Mathematics Placement Test administered by mathematics department, or permission of instructor. Students may not also take for credit ECN 241 or SOC 211 for credit towards Core Goal 4: Quantitative Reasoning

PHI 108 - Professional Ethics (3 credits)

This course examines ethical dilemmas encountered by professionals at work. Journalism, health care, law, education, computer science/information technology and public relations all provide examples.

SOC 151 - Introduction to Sociology (3 credits)

Introduction to sociology and United States society: social class, race, ethnicity, sex, age, family, education, religion, sub-cultures, polity, economy, deviance, urban life, collective behavior, population, bureaucracy, social groups, and social change.