

Applied Logistics - CPS (APL)

APL 6000. Foundations of Applied Logistics Execution. (3 Hours)

Introduces students to the tactics of logistics and distribution. Explores application of fundamentals in the context of modern consumer expectations: endless shelf, immediate access, expanded notion of the last mile that includes delivery anywhere.

APL 6010. Warehouse Management. (3 Hours)

Introduces students to all aspects of warehouse management, from physical design to automation decisions to using data for capacity planning and optimization.

APL 6020. Freight Management. (3 Hours)

Introduces students to all aspects of freight management, carrier selection and management, rates, billing, decision analysis, rules, regulations, and transportation management systems. Emphasizes data use for optimization.

APL 6030. ERP Systems for Inventory Management. (3 Hours)

Covers the basics of enterprise resource planning (ERP) systems and inventory management, with hands-on tactics of product visibility for day-to-day operations. Focuses on inventory management technology and the organizational structure needed to support different channel networks in logistics.

APL 6050. Supplier Management. (3 Hours)

Covers tactics in managing suppliers for the day-to-day operations, including supplier appraisal, price and contract negotiations, supplier audits, supplier quality and delivery, and e-procurement.

APL 6100. Advanced Technology in Logistics and Distribution. (3 Hours)

Explores the latest technology development and how it applies to logistics and distribution science. Introduces concepts of emerging technologies and their use and purpose. Topics include the Internet-of-things (IoT) and its application in logistics, integrating IoT and cloud computing, machine learning applications, and the issues and challenges with new technology adoption.

Prerequisite(s): APL 6000 with a minimum grade of C- ; APL 6030 with a minimum grade of C-

APL 6980. Applied Logistics Capstone. (3 Hours)

Offers students, working as individuals or in groups, an opportunity to design and carry out an interdisciplinary project conducted with real-world clients. Students apply strategic frameworks and best practices to help organizations improve logistics operations. Emphasizes the role of digital transformation, applied analytics, and the ability of digital technologies to help solve for disruptions in distribution and warehousing networks.