Fold each printed sheet in half lengthwise. The left side of the document will list the term and the right side will list the definition. Tape or staple the open edges of your flashcards. Cut out your flashcards on the solid lines indicated and fold them on the dotted lines.

Module 8
Section B: Technology

Term
Advanced planning and scheduling (APS)

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Techniques that deal with the analysis and planning of logistics and manufacturing during short, intermediate, and long-term time periods. Describes any computer program that uses advanced mathematical algorithms or logic to perform optimization or simulation on finite capacity scheduling, sourcing, capital planning, resource planning, forecasting, demand management, and others. These techniques simultaneously consider a range of constraints and business rules to provide real-time planning and scheduling, decision support, available-to-promise, and capable-to-promise capabilities.

Module 8
Section B: Technology

Term
Automated guided vehicle system (AGVS)

APICS CPIM Learning System © 2025

A transportation network that automatically routes one or more material handling devices, such as carts or pallet trucks, and positions them at predetermined destinations without operator intervention.

Module 8
Section B: Technology

Term
Closed-loop MRP

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A system built around material requirements planning that includes the additional planning processes of production planning (sales and operations planning), master production scheduling, and capacity requirements planning. Once this planning phase is complete and the plans have been accepted as realistic and attainable, the execution processes come into play. These processes include the manufacturing control processes of input-output (capacity) measurement and detailed scheduling and dispatching, as well as anticipated delay reports from both the plant and suppliers, supplier scheduling, and so on. [This term] implies not only that each of these processes is included in the overall system, but also that feedback is provided by the execution processes so the planning can be kept valid at all times.

Module 8
Section B: Technology

Term
Cloud computing

APICS CPIM Learning System © 2025

An emerging way of computing in which data is stored in massive data centers that can be accessed from any computer connected to the internet.

Module 8
Section B: Technology

Term
Data governance

APICS CPIM Learning System © 2025

The overall management of data's accessibility, usability, reliability, and security. Used to ensure data record accuracy.

Module 8
Section B: Technology

Term
Decision support system (DSS)

APICS CPIM Learning System © 2025

A computer system designed to assist managers in selecting and evaluating courses of action by providing a logical (usually quantitative) analysis of the relevant factors.

Module 8
Section B: Technology

Term
Digital Capabilities Model (DCM) for Supply Networks

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A reference model for supply chain professionals to guide the development of digital supply networks. The model is designed in a relational manner to help envision and then build the digitally enabled capabilities required to transform linear supply chains into a set of dynamic networks.

Module 8
Section B: Technology

Term
Electronic data interchange (EDI)

APICS CPIM Learning System © 2025

The paperless (electronic) exchange of trading documents, such as purchase orders, shipment authorizations, advanced shipment notices, and invoices, using standardized document formats.

Module 8
Section B: Technology

Term
Enterprise resource planning (ERP)

APICS CPIM Learning System © 2025

Framework for organizing, defining, and standardizing the business processes necessary to effectively plan and control an organization so the organization can use its internal knowledge to seek external advantages. An ERP system provides extensive databanks of information including master file records, repositories of cost and sales, financial details, analysis of product and customer hierarchies, and historic and current transactional data.

Module 8
Section B: Technology

Term
Gap analysis

APICS CPIM Learning System © 2025

A tool designed to assess the differences between a service that is offered and customer expectations.

Module 8
Section B: Technology

Term
Information system architecture

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A model of how the organization operates regarding information. The model considers four factors: (1) organizational functions; (2) communication of coordination requirements; (3) data modeling needs; and (4) management and control structures. [This] should be aligned with and match the architecture of the organization.

Module 8
Section B: Technology

Term
Internet of things (IOT)

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An environment in which objects, animals or people are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. This allows objects to be sensed and controlled remotely across existing network infrastructure, creating opportunities for more direct integration between the physical world and computer-based systems.

Module 8
Section B: Technology

Term
Learning curve

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A curve reflecting the rate of improvement in time per piece as more units of an item are made. A planning technique, [this] is particularly useful in project-oriented industries in which new products are frequently phased in. The basis for the [this] calculation is that workers will be able to produce the product more quickly after they get used to making it. Syn.: experience curve, manufacturing progress curve.

Module 8
Section B: Technology

Term
Manufacturing resource planning (MRP II)

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A method for the effective planning of all resources of a manufacturing company. Ideally, it addresses operational planning in units and financial planning in dollars, and has a simulation capability to answer what-if questions. It is made up of a variety of processes, each linked together: business planning, production planning (sales and operations planning), master production scheduling, material requirements planning, capacity requirements planning, and the execution support systems for capacity and material. Output from these systems is integrated with financial reports such as the business plan, purchase commitment report, shipping budget, and inventory projections in dollars. [It] is a direct outgrowth and extension of closed-loop MRP.