

# Developing an SAP certification course for the Army Logistics University

*By Travis J. James*

As stated in the 2012 Army Posture Statement, our future Army will be smaller than the current force but able to expand rapidly when our nation calls. To structure and pace reductions in the nation's ground forces in a way that preserves the ability to surge, regenerate, and mobilize the capabilities needed for any contingency, it is imperative that sustainment organizations from the strategic to tactical levels share real-time data.

Tactical organizations will continue to face new and evolving threats while the Army increases emphasis on accountability and maintenance. Responsible stewardship will play key roles in transforming the Army into a flexible organization.

To provide "readiness at best value" within the constraints of the economic environment, the Army must further develop its integrated supply chain and logistics management system.

GCSS-Army Actions to foster responsible stewardship and information system effectiveness within the institutional Army are underway with the fielding of the Army's tactical enterprise resource planning (ERP) system, Global Combat Support System-Army (GCSS-Army). GCSS-Army will track supplies, maintenance operations, spare parts, and organizational equipment. It also can manage human resources, calculate total cost of ownership, and conduct other supply chain financial transactions.

This modernized application will subsume outdated standard Army management information systems that are not financially compliant and integrate approximately 40,000 local supply and logistics databases into a single authoritative system. When fully deployed, GCSS-Army will affect every supply room, motor pool, warehouse, and property book office in the total Army, improving operational and budgetary efficiency and asset visibility.

Readiness and historical ordering data will be used in forecasting and demand planning in order to reduce the variability of distribution lead times, capacity use, and inventory. Commanders at all levels will need to embrace collaborative information sharing while ensuring personnel are adequately trained to operate integrated data sharing systems.

Preparing Through Partnership Before the Army fielded its Systems, Applications, and Products in Data Processing (SAP)-based ERP solution, the Army Logistics University (ALU) anticipated that logisticians would need to gain a functional understanding of the SAP application suite. ALU partnered with Virginia State University (VSU) and established a continuing education program that grants both a VSU Enterprise Information Systems (EIS) Certificate and an SAP Business Foundation and Integration Associate Certification.

During the four-month program, paid for by the students, participants complete three VSU undergraduate courses leading to the VSU EIS certificate. The VSU courses cover topics in ERP systems, project management, Microsoft Project, SAP Project System, logistics information systems, business process modeling, and enterprise resource configurations. In these courses, the students learn about the challenges of transitioning from legacy systems to an ERP system, receive an overview of ERP systems, and gain the project management skills needed to conduct full-scale ERP integration.

The EIS certificate program comprises information and logistics technology (INLT) courses 292, 485, 444, and 499.

INLT 292, Introduction to ERP, covers approaches to designing, planning, and controlling logistics management. It also provides information on the core aspects of ERP infrastructure and application using extensive practical exercises.

INLT 485, Project Management, covers the principles and techniques of managing logistics information systems projects, including working with project teams, project budgeting, scheduling, and planning (including Microsoft Project and SAP Project System).

INLT 444, Enterprise Resource Configurations, provides the knowledge to configure an ERP system to match the business requirements of an organization. Specific topics covered include business process modeling, ERP solutions for industry, creating an organizational structure, and creating master and transactional data.

INLT 499, SAP Business Integration Consultant Workshop and Certification Preparation Course, is an intense 10-day SAP workshop for participants who have completed the VSU courses and earned the VSU EIS certificate. An SAP-sanctioned instructor will facilitate the workshop and demonstrate how fundamental business processes interact with SAP.

The topics covered during days one through nine will include: sales order management, material and production planning, procurement, inventory management, plant maintenance, human capital management, and management accounting. On day 10, students take the Total SAP ERP 10 examination at a third-party testing facility. Students who successfully pass the exam will receive the SAP Business Foundation and Integration Associate Certification and official recognition as an SAP business consultant.

Recommended Changes As the pilot program matures to satisfy the training needs of Army sustainers, I recommend the following changes: \* Incorporate a foundational course to provide knowledge of global commercial supply chain processes and terminology.

\* Incorporate GCSS-Army scenarios and vignettes into the curriculum.

\* Expand certification opportunities.

\* Develop GCSS-Army professional functional area subject matter experts.

Incorporate a foundational course. Based on slight terminology and procedural differences associated with the transition to a tactical ERP system, a prerequisite course or collection of courses would provide a knowledge base before the start of the program. In my experience, completing the Association for Operations Management (APICS) Certified Supply Chain Professional (CSCP) certification tremendously helped to prepare for INLT 292.

APICS is the global leader and premier source of knowledge in supply chain and operations management, including production, inventory, materials management, purchasing, and logistics. APICS is the governing body for both the Certification in Production and Inventory Management (CPIM) and CSCP certifications.

The APICS CPIM program provides students with the opportunity to understand and evaluate production and inventory activities within a company's global operations. APICS CPIM and CSCP training will assist program participants in acquiring the foundational knowledge and skills needed to create consistency and foster collaboration through best practices and corporate communication.

Additionally, APICS certifications will enhance learning and validate that participants have mastered essential terminology, concepts, and strategies (related to demand management, procurement management, supplier planning, material requirements planning, capacity planning, sales and operations planning, master scheduling, performance measurements, supplier relationships, quality control, and continuous improvement) before starting the VSU EIS certificate and SAP Business Foundation and Integration Associate Certification.

Armed with the knowledge from obtaining either APICS certification, participants establish a firm learning foundation for GCSS-Army implementation success.

Incorporate GCSS-Army scenarios. CSCPs or CPIMs begin the program with INLT 292, Introduction to ERP, which introduces the functional SAP software through hands-on exercises and case studies of the fictional company Global Bike Incorporated. The case studies on materiel management, sales and distribution, and financial and managerial accounting are well designed for demonstrating how processes, user roles, and data are integrated throughout the enterprise's SAP software. However, an improvement would be to incorporate case studies, vignettes, and research

papers related to GCSS-Army and other SAP Defense Forces and Public Security (DFPS) Solutions.

Expand certification opportunities. Project management is the art and science of managing time, personnel, and quality-related resources to complete a project. The scheduled fielding of GCSS-Army will require individuals involved in the transition from legacy systems and ERP to balance time, quality, and cost to ensure normalized data is migrated with integrity.

Using a combination of the Project Management Book of Knowledge and Microsoft Project tutorials, Project Management (INLT 485) teaches this skill while meeting a 23-hour project management education requirement for the Project Management Institute (PMI) Certified Associate in Project Management certification exam and a 35-hour requirement for the PMI Project Management Professional exam.

GCSS-Army operates on the SAP DFPS component that enhances the standard SAP functions. DFPS enables armed forces, police, and aid organizations to perform business tasks and processes from their home stations or temporary bases during operations and exercises. Organizational flexibility, accounting and funds management, materials management, support for flight operations, and maintenance are the key functionalities within DFPS.

Using the capabilities within DFPS, GCSS-Army can map process chains from planning through implementation, execution, and completion of operations and exercises. More relevant to the Army's modular structure, the DFPS component will provide commanders with a better capability to task organize units and resource requirements.

INLT 444, Enterprise Resource Configuration, introduces the considerations needed to realize the full benefits of the system as units implement GCSS-Army into their sustainment, supply chain management, and logistics operations.

As a requirement for the SAP University Alliance program, which significantly reduces SAP-related training costs, students must complete a partnered university's SAP-related coursework before participating in the 10-day SAP workshop. INLT 292, 485, and 444 adequately meet this requirement, but for additional relevance within the Army community, each course will require minor modifications to tailor the content to Army learners and include GCSS-Army's implementation requirements.

Develop professional functional area subject matter experts. As discussed, the final phase of the pilot program is the SAP certification workshop. After completing the workshop and successfully passing the certification exam, participants will have the credentials of a general SAP business consultant. The SAP Business Foundation and Integration Associate Certification is a great entry into SAP; however, the certification program provides only a general knowledge of the SAP business processes.

In order to develop a training program that builds the intellectual capacity needed to capitalize on the software's full capability; I recommend building on the general knowledge acquired in the Business Foundation and Integration Certification program to develop functional subject matter experts.

For example, ordnance lieutenants, warrant officers, and noncommissioned officers would receive specialized training in the plant maintenance module of SAP. Quartermaster personnel would be trained in the materiel management, warehouse, and enterprise asset modules. Transportation personnel would master the transportation module, and human resources personnel would learn the human resources module. Finance personnel would be taught the finance module of SAP, and support operations officers, executive officers, and sustainment planners would require specialized training in the business intelligence and planning functions within SAP.

The business intelligence function within SAP allows users to create customized reports to meet the needs of their respective commands. Understanding the planning functions within SAP will allow planners to analyze the master and organizational data to perform optimized planning, budgeting, and forecasting activities. Using integrated data inputs to the military decision making process allows logisticians to better determine if a mission, operation, or training event is logistically supportable in a resource-constrained environment.

The ALU and VSU partnered program, along with ongoing GCSS-Army training initiatives, clearly demonstrates

ALU's ability to anticipate educational requirements and develop relevant programs to meet the demands of the smaller but adjustable Army of the future. Modifications to this pilot program will arm personnel with the skills needed to maintain real-time visibility of unit capabilities, forecast requirements, and mitigate the risk of any anticipated shortfalls within GCSS-Army.

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