

# ENTERPRISE RESOURCE PLANNING

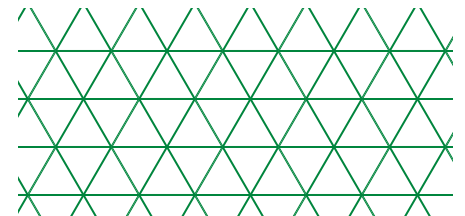
Learn the technologies that allow an organization to make effective business decisions based on operational data.

Corporations worldwide have focused on improving business processes for the past two decades. In fact, while most Fortune 500 companies have already adopted Enterprise Resource Planning (ERP) systems, now many midsize companies are also planning ERP implementations.

With a commitment to keep pace with these changes in business processes and technology, the University of Missouri system joined SAP's™ University alliance and Microsoft's™ University Alliance programs in order to continue and expand classroom capabilities for integrating ERP software into the curriculum. ERP systems can be used to reinforce

many of the concepts covered in the business discipline. ERP systems incorporate state-of-the-art technology, providing a comprehensive teaching tool for business and for information systems. Universities that have successfully incorporated an ERP system into their curricula find unprecedented student demand for those subjects.

ERP can be viewed as a combination of business management practice and technology, where Information Technology integrates with a company's core business processes to enable the achievement of specific business objectives. This Graduate Certificate in Enterprise Resource Planning prepares students for positions as both technical and business consultants in the ERP field.



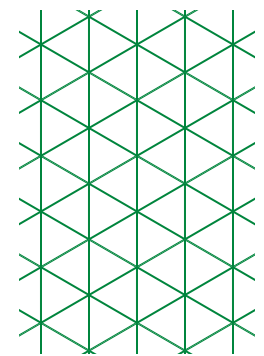
## Admission requirements

The graduate certificate program is open to all individuals holding a bachelor's, master's or Ph.D. degree in areas such as business, social sciences, technology, engineering, or related disciplines.

In order to receive a Graduate Certificate, the student must have an average graduate cumulative grade point of 3.0 or better on a 4.0 scale in the certificate courses taken. Students admitted only to the certificate program will have non-degree graduate status but will earn graduate credit for the courses they complete.

If the four-course sequence approved by the graduate advisor is completed with a grade of B or better in each of the courses taken, the student will, upon application, be admitted to the Master of Business Administration or to the Master of Science in Information Science and Technology. The certificate courses taken by students admitted to the program will count towards the MBA program or the M.S. in Information Science and Technology degree program.

Once admitted to the Certificate program, a student will be given three years to complete the program as long as a B or better average is maintained in the courses taken.



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# COURSE DESCRIPTIONS

Most courses are offered both on campus and via distance education

## REQUIRED CORE COURSES

### ERP 5110 ERP Systems Design and Implementation

This course provides a technical overview of Enterprise Resource Planning Systems and their impact on organizations. SAP's ERP system is introduced to illustrate the concepts, fundamentals, framework, general information technology context, the technological infrastructure, and integration of business enterprise-wide applications.

*Prerequisites: IST 1750*

### ERP 6120 Enterprise Resource Planning (ERP) Systems Configuration and Integration

Implementation and design practices for business processes in Enterprise Resource Planning (ERP) systems. The course will examine and apply techniques used in SAP ERP system for system configuration and integration, with a focus on Financial Accounting, logistics, Controlling, and production.

*Prerequisite: ERP 5110*

## ELECTIVE COURSES (CHOOSE TWO)

### ERP 5110 ERP in Small & Mid-Size Enterprises

Provides an overview of enterprise applications for small and midsize companies. A leading platform such as Microsoft Dynamics AX or SAP Business One is introduced to illustrate theories and practical enterprise-wide applications for entrepreneurs, who manage business functions across sales, operation, and financials, all in a single integrated system.

*Prerequisites: ERP 5110 or ERP 2110.*

### ERP 5210 Performance, Dashboard, Scorecard and Data Visualization

This course will study different strategic performance management systems including dashboards, management cockpit, scorecards, and strategy maps in an organization. SAP's Strategic Enterprise Management (SEM), BusinessObjects Xcelsius, or similar tools will be used to enhance student education with real world applications.

*Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110*

### ERP 5240 Enterprise Portal and Mobile Application Development

This course provides conceptual foundation and hands on experience in web based applications development deployed through an Enterprise Portal platform. SAP NetWeaver Enterprise Portal and tools including Visual Composer and Web Dynpro will be used to develop the applications.

*Prerequisites: Programming knowledge and either ERP 2110 or accompanied by ERP 5110*

### ERP 5310 Supply Chain Management Systems in an ERP Environment

The course will study the need for supply chain integration and the challenges of managing complex interfaces. This course focuses on the systems approach to the planning, analysis, design, development, and evaluation of supply chain management. SAP's Supply Chain Management (SCM) or similar software is used to illustrate activities that lead to integration of information and material flows across multiple organizations in the supply chain including global supply chains.

*Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110*

### ERP 5410 Use of Business Intelligence

This course introduces data-oriented techniques for business intelligence. Topics include Business Intelligence architecture, Business Analytics, and Enterprise Reporting. SAP Business Information Warehouse, BusinessObjects, or similar tools will be used to access and present data, generate reports, and perform analysis.

*Prerequisites: IST 3423 or equivalent; ERP 2110 or preceded or accompanied by ERP 5110*

### ERP 5510 ERP System Administrations

System administration and performance monitoring practices for an Enterprise Resource Planning (ERP) system will be studied. Students will install an instance of an ERP system and establish user management attributes and system security.

*Prerequisite: ERP 5110*

### ERP 6220 Enterprise Performance Database (EPMS) Prototyping

This course will study implementation and design practices for enterprise performance management and monitoring systems with a focus on dashboards, balanced scorecard, and value based management. SAP's Strategic Enterprise Management (SEM), Business Object Xcelsius, or similar tools will be used for project implementation.

*Prerequisite: ERP 5110; ERP/IST 6444*

### ERP/IST 6444 Essentials of Data Warehouses

This course presents the topic of data warehouses and the value to the organization. It takes the student from the database platform to structuring a data warehouse environment. Focus is placed on simplicity and addressing the user community needs.

*Prerequisite: IST 3423 or equivalent relational database experience*

### ERP 6610 Advanced Customer Relationship Management in ERP Environment

This customer-centric course emphasizes identification (targeting), acquisition, retention, and development (expansion) of (profitable) customers. It also covers effective and efficient management of customers with utilization of information technology. The SAP CRM module and SAS Enterprise Miner are used to enhance student education with real world applications and prepare graduates for future career requirements.

*Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110*