# ENTERPRISE RESOURCE PLANNING (ERP)

**ERP 5000 Special Problems** (IND 0.0-6.0)
Problems or readings on specific subjects or projects in the department. Consent of instructor required.

**ERP 5001 Special Topics** (LEC 0.0-6.0)
This course is designed to give the department an opportunity to test a new course. Variable title.

**ERP 5110 Enterprise Resource Planning Systems Design and Implementation** (LEC 3.0)
This course provides a technical overview of Enterprise Resource Planning Systems and their impact on organizations. SAP is introduced to illustrate the concepts, fundamentals, framework, general information technology context, technological infrastructure, and integration of business enterprise-wide applications. Prerequisites: Preceded or accompanied by ERP 2110; or Graduate Standing and computer programming knowledge.

**ERP 5130 ERP in Small & Mid-Size Enterprises** (LEC 3.0)
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** (LEC 3.0)
This course studies performance visualization management systems including dashboards, Balanced Scorecard, and strategy maps in an organization. SAP's HANA Platform, Predictive Analytics, Tableau, and Power BI are used to develop the dashboard applications. Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110.

**ERP 5240 Enterprise Application Development and Software Security** (LEC 3.0)
This course provides a conceptual foundation and hands on experience in web and mobile based (HTML5) applications development deployed through an enterprise platform. Enterprise development tools, such as SAP HANA Cloud Platform, will be used to build these apps. The course also covers software cybersecurity from a web and mobile perspective. Prerequisites: Programming knowledge and either ERP 2110 or preceded or accompanied by ERP 5110.

**ERP 5310 Supply Chain Management Systems in an ERP Environment** (LEC 3.0)
The course studies the need for supply chain integration and the challenges of managing complex interfaces using the systems approach for the planning, analysis, design, development, and evaluation of supply chain. SAP's ERP ECC, SCM, BW, and Sybase Unwired Platform are used to deploy SCM apps. Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110.

**ERP 5410 Use of Business Intelligence** (LEC 3.0)
This course introduces data-oriented techniques for business intelligence. Topics include Business Intelligence architecture, Business Analytics, and Enterprise Reporting. SAP Business Information Warehouse, Business Objects, or similar tools will be used to access and present data, generate reports, and perform analysis. Prerequisites: IS&T 1750 or equivalent.

**ERP 5510 ERP System Administration** (LEC 3.0)
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 6001 Special Topics** (IND 0.0-6.0)
This course is designed to give the department an opportunity to test a new course. Variable title.

**ERP 6120 Enterprise Resource Planning: Systems Config and Integration** (LEC 3.0)
Implementation and design practices for business processes in Enterprise Resource Planning (ERP) systems. The course examines and applies techniques using SAP S/4HANA ERP or similar for configuration and integration with a focus on financial accounting and logistics. Fiori configuration will be examined to develop ERP user interface. Prerequisite: ERP 2110, ERP 5110, or ERP 5310.

**ERP 6220 Data Modeling & Visualization Prototyping for Enterprise Decision Dashboard** (LEC 3.0)
Study integration of data modeling, data warehouse, and visualization prototyping in the design and implementation of enterprise decision dashboards for descriptive, predictive, and prescriptive analytics. Project implementations use in-memory data warehouse, visualization, and modeling tools including SAP HANA Studio, Eclipse IDE, SAS Viya, or similar. Prerequisites: One of the following: IST 3423, IST 4444, IST 5423, ERP 5410, ERP 6444, or IS&T 6444.

***ERP 6444 Essentials of Data Warehouses*** (LEC 3.0)
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: IS&T 3423 or equivalent relational database experience. (Co-listed with IS&T 6444).

***ERP 6610 Advanced Customer Relationship Management in ERP Environment*** (LEC 3.0)
The course emphasizes identification (targeting), acquisition, retention, and development (expansion) of (profitable) customers, as well as effective and efficient management of customers, using IT. SAP CRM, SAS BI tools, and mobile application development are used to illustrate concepts in the class. Research paper and presentation required. Prerequisites: ERP 2110 or preceded or accompanied by ERP 5110.