ERP 5100: ERP System Administration
Prerequisite: ERP 5110
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.

ERP 6220: Data Modeling & Visualization Prototyping for Enterprise Decision Dashboards
Prerequisite: IST 4444, ERP 5110, ERP 5310, or ERP 5110
This course presents the topic of enterprise data warehouse and visualization prototyping in the design and implementation of enterprise decision dashboards for descriptive, predictive, and prescriptive analytics. Project implementations use SAP HANA Studio, Fiori, Predictive Analytics, Design Studio/Eclipse IDE, and SAS Viya.

ERP 6444: Essentials of Data Warehouses
Prerequisite: IST 3423 or Comp Sci 304 or equivalent relational database experience
This course presents the topics of data warehouses and their 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.

ERP 6610: Advanced Customer Relationship Management
Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110
This course presents the topic of data warehouses and their 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.
## ERP Courses Offer Plan

### ERP Courses

**Course** | **Course Title** | **Course Supplement Software/SAP Module Mappings** | **Course Schedule** | **ERP Course Suggestions** | **Joint Industry Certificate** | **Undergraduate Students Curriculum Options** | **Graduate Certificate (4 courses)** | **ERP** | **Business Intelligence** | **Digital Supply Chain**
---|---|---|---|---|---|---|---|---|---|---
**ERP 2110** | Intro to ERP | SAP S/4HANA: FT, MM, SD, PP, CO and BI | Spring, Summer, Fall | | | | | | | |
**ERP 4110** | ERP Systems in Health Care Industry | MedTech, OpenVita, etc. | Spring, Summer, Fall | | | | | | | |
**ERP 4220** | Introduction to Enterprise Decision Dashboard Prototyping | SAP BW/BI: S/4HANA Studio (Eclipse IDE), Predictive Analytics/Lumira or SAP Analytics Cloud (SAC), SAP Designer Studio (Eclipse IDE), S/4HANA Studio, Visual Analytics (Eclipse IDE), SAS Viya (Visual Analytics, Visual Statistics, Data Mining) | Spring, Summer, Fall | | | | | | | |
**ERP 4610** | Customer Relationship Management | SAP CRM: Marketing/Campaign Mgmt., Lead & Opportunity Mgmt., Service & Interaction Center, CRM Analytics, CRM Reporting, SAP Mobility (Eclipse), SAS Enterprise Miner | Spring, Summer, Fall | | | | | | | |
**ERP 5110** | ERP Design & Implementation | SAP S/4HANA: FT, MM, SD, PP, CO, BI/HCM | Spring, Summer, Fall | | | | | | | |
**ERP 5130** | ERP in Small- and Medium Enterprise | Microsoft Dynamics ERP, Power BI, CRM | Spring, Summer, Fall | | | | | | | |
**ERP 5210** | Dashboards, Scorescards, and Data Visualization | SAP S/4HANA: C1, CO, Tableau, SAP Predictive Analytics/Lumira, Microsoft PowerBI | Spring, Summer, Fall | | | | | | | |
**ERP 5240** | Enterprise Application Development and Software Security | HANA Cloud Platform (HCP), HTML 5, S/4 HANA, Enterprise Miner | Spring, Summer, Fall | | | | | | | |
**ERP 5310** | Supply Chain Management Systems | SAP S/4HANA: PP, MM, SD, S4 SCM, SAS Viya (Visual Analytics, Visual Statistics, Data Mining), Microsoft PowerBI | Spring, Summer, Fall | | | | | | | |
**ERP 5410** | Use of Business Intelligence | SAP BI: BI Warehouse, BI queries, InfoView, SAP HANA, BusinessObjects Predictive Analytics/Lumira & R, Web Intelligence, Business Explorer | Spring, Summer, Fall | | | | | | | |
**ERP 5510** | ERP System Administration | SAP BASIS, Solution Manager | Spring, Summer, Fall | | | | | | | |
**ERP 6120** | ERP Configuration | SAP S/4HANA Configuration: FI, MM, SD, PP, CO, SAP Designer for SAP (new interface design) | Spring, Summer, Fall | | | | | | | |
**ERP 6220** | Data Modeling & Visualization Prototyping for Enterprise Decision Dashboards | SAP BW/BI: Data Warehouse, BI queries, InfoView, SAP HANA, Data Marts, SAP HANA Studio (Eclipse IDE), Predictive Analytics/Lumira or SAP Analytics Cloud (SAC), SAP HANA (asynchronous only) | Spring, Summer, Fall | | | | | | | |
**IST 4444** | Data Warehouse | SAP BW/BI: Data Warehouse, BI queries, InfoView, SAP HANA, BI queries, InfoView, SAP HANA, BusinessObjects Predictive Analytics/Lumira & R, Web Intelligence, Business Explorer | Spring, Summer, Fall | | | | | | | |
**IST 5100** | Advanced Customer Relationship Management in ERP Environment | SAP CRM: Marketing/Campaign Mgmt., Lead & Opportunity Mgmt., Service & Interaction Center, CRM Analytics, CRM Reporting, SAP Enterprise Miner | Spring, Summer, Fall | | | | | | | |
**IST 5750** | Introduction to GIS | SAP S/4HANA ERP System Overview | Spring, Summer, Fall | | | | | | | |
**IST 6443** | Information Retrieval & Analysis | SAS Enterprise Miner, SAS Text Miner, SAP Predictive Analytics (Social Network Analyser) | Spring, Summer, Fall | | | | | | | |
**IST 6445** | Database Marketing | SAS Base, SAS Enterprise Miner | Spring, Summer, Fall | | | | | | | |
**BUS 1210** | Financial Accounting | SAP FI (vary by instructor and semester) | Spring, Summer, Fall | | | | | | | |
**ME 1230** | Engineering Accounting and Finance | SAP FI (vary by instructor and semester) | Spring, Summer, Fall | | | | | | | |
**ME 3565** | Manufacturing | SAP PI (by request) | Spring, Summer, Fall | | | | | | | |
**ME 3569** | Operations and Production Mgmt. | SAP PI (by request) | Spring, Summer, Fall | | | | | | | |
**ME 5653** | Rapid Product Design and Optimization | SAP PI (by request) | Spring, Summer, Fall | | | | | | | |
**ME 5659** | Production Planning And Scheduling | SAP PI (by request) | Spring, Summer, Fall | | | | | | | |
**ME 5762** | Design for Manufacture | SAP PI (by request) | Spring, Summer, Fall | | | | | | | |
**ME 5766** | Integrated Product and Process Design | SAP PI (by request) | Spring, Summer, Fall | | | | | | | |
**ME 5768** | Probabilistic Engineering Design | SAP PI (by request) | Spring, Summer, Fall | | | | | | | |
**STAT 5250** | Statistical Data Analysis using SAS | SAS Base | Spring, Summer, Fall | | | | | | | |
**STAT 5256** | Regression Analysis | SAS Base | Spring, Summer, Fall | | | | | | | |

### Required Certificate/Emphasis/Minor Courses

- **ERP or BI Graduate Certificate**
- **ERP Emphasis**
- **Digital Supply Chain Minor**

### Notes

1. Choose ONE course from this group
2. Choose ONE course from this group
3. Choose ONE course from this group
4. Choose AT LEAST ONE from this group