

**OSTİM TECHNICAL UNIVERSITY  
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES  
MANAGEMENT INFORMATION SYSTEMS DEPARTMENT  
COURSE SYLLABUS FORM**

<b>MIS 311 Enterprise Resource Planning</b>							
<b>Course Name</b>	<b>Course Code</b>	<b>Period</b>	<b>Hours</b>	<b>Application</b>	<b>Laboratory</b>	<b>Credit</b>	<b>ECTS</b>
Enterprise Resource Planning	MIS 311	5	3	0	0	3	4

<b>Language of Instruction</b>	English
<b>Course Status</b>	Compulsory
<b>Course Level</b>	Bachelor
<b>Learning and Teaching Techniques of the Course</b>	Lecture, Question-Answer, Problem Solving

**Course Objective**

To teach the basic concepts of enterprise resource planning systems, related technologies and business processes, approaches to system selection, installation and management, the relationship between basic modules and other integrated systems.

**Learning Outcomes**

- The students who succeeded in this course will be able;
1. They can model the process view of businesses.
  2. They can create a BOM on a real product,
  3. They acquire the knowledge of the basic concepts of MRP/MRP II and ERP.
  4. They can understand the relationship between ERP and other integrated systems.
  5. They can understand the operation of ERP modules and analyze their relationships.
  6. They may have a basic knowledge of designing and using an ERP software.

**Course Outline**

It covers the general framework of Enterprise Resource Planning systems, development process, application cycle, technologies used, architecture and installation, maintenance, system selection and project planning, ERP modules, integration with ERP and other systems.

<b>Weekly Topics and Related Preparation Studies</b>		
<b>Weeks</b>	<b>Topics</b>	<b>Preparation Studies</b>
<b>1</b>	Production System and Resources, Resource Planning Concept and Development of Enterprise Resource Planning (ERP)	
<b>2</b>	Basic concepts of ERP and its importance for businesses	
<b>3</b>	Bills of Materials, Master Production Schedule (MPS), Stocks	
<b>4</b>	Material Requirements Planning (MRP), Rough Capacity Planning (RCCP), Closed Loop Material Requirements Planning, Capacity Requirements Planning (CRP)	
<b>5</b>	Production Resource Planning (MRP II)	
<b>6</b>	ERP technologies	
<b>7</b>	ERP process management	
<b>8</b>	<b>MIDTERM EXAM</b>	
<b>9</b>	Basic modules of ERP systems: Basic operations (manufacturing, logistics, material, quality and maintenance management)	
<b>10</b>	Basic modules of ERP systems: Financial accounting and management accounting	
<b>11</b>	Basic modules of ERP systems: Sales and marketing, human resources	
<b>12</b>	ERP and and Customer relations and supply chain management	
<b>13</b>	ERP and business analytics	
<b>14</b>	Management of ERP projects	
<b>15</b>	Challenges and critical success factors in ERP projects	
<b>16</b>	<b>FINAL EXAM</b>	

<b>Textbook(s)/References/Materials:</b>
<b>Textbook:</b> McGraw-Hill/Irwin, Boston Mary Sumner (2014), “Enterprise Resource Planning”, Pearson Education
<b>Supplementary References:</b>
<b>Other Materials:</b> Olson, D.L. (2004), “Managerial Issues of Enterprise Resource Planning Systems”.

Assessment		
Studies	Number	Contribution margin (%)
Attendance		
Lab		
Class participation and performance		
Field Study		
Course-Specific Internship (if any)		
Quizzes / Studio / Critical		
Homework		
Presentation		
Projects	1	15
Report		
Seminar		
<b>Midterm Exam/Midterm Jury</b>	<b>1</b>	<b>35</b>
<b>General Exam / Final Jury</b>	<b>1</b>	<b>50</b>
<b>Total</b>		<b>100</b>
<b>Success Grade Contribution of Semester Studies</b>		<b>50</b>
<b>Success Grade Contribution of End of Term</b>		<b>50</b>
<b>Total</b>		<b>100</b>

ECTS / Workload Table			
Activities	Number	Duration (Hours)	Total Workload
<b>Course hours (Including the exam week): 16 x total course hours)</b>	16	3	48
Laboratory			
Application			
Course-Specific Internship (if any)			
Field Study			
<b>Study Time Out of Class</b>			
Presentation / Seminar Preparation			
Projects	1	15	15
Reports			
Homework			
Quizzes / Studio Review			
Preparation Time for Midterm Exams / Midterm Jury	1	20	20
Preparation Period for the Final Exam / General Jury	1	40	40
<b>Total Workload</b>		<b>(123/30 = 4,1)</b>	<b>123</b>

Course' Contribution Level to Learning Outcomes						
Nu	Learning Outcomes	Contribution Level				
		1	2	3	4	5
<b>LO1</b>	They can model the process view of businesses.					X
<b>LO2</b>	They can create a BOM on a real product,					X
<b>LO3</b>	They acquire the knowledge of the basic concepts of MRP/MRP II and ERP.					X
<b>LO4</b>	They can understand the relationship between ERP and other integrated systems.					X
<b>LO5</b>	They can understand the operation of ERP modules and analyze their relationships.					X
<b>LO6</b>	They may have a basic knowledge of designing and using an ERP software.					X

<b>Relationship Between Course Learning Outcomes and Program Competencies (Department of Management Information Systems)</b>								
<b>Nu</b>	<b>Program Competencies</b>	<b>Learning Outcomes</b>					<b>Total Effect (1-5)</b>	
		<b>LO1</b>	<b>LO2</b>	<b>LO3</b>	<b>LO4</b>	<b>LO5</b>		<b>LO6</b>
<b>1</b>	Recognize and distinguish the basic concepts such as data, information, and knowledge in the field of Management Information Systems and know the processes to be followed for data acquisition, storage, updating, and security.	X			X	X	X	<b>5</b>
<b>2</b>	Develop and manage databases suitable for collecting, storing, and updating data.	X			X	X	X	<b>5</b>
<b>3</b>	As a result of his/her ability to think algorithmically, and easily find solutions to problems concerning basic business functions.	X	X		X	X	X	<b>5</b>
<b>4</b>	Learn programming logic, and have information about current programming languages.					X		<b>3</b>
<b>5</b>	Be able to use up-to-date programming languages.				X	X	X	<b>2</b>
<b>6</b>	Be able to take part in teamwork or lead a team using knowledge of project management processes.							
<b>7</b>	Know ethical and legal rules, and use professional field knowledge within the scope of ethical and legal rules.	X	X	X	X	X	X	<b>5</b>
<b>8</b>	Know the fundamental areas of business administration namely management and organization, production, finance, marketing, numerical methods, accounting, etc., and have the knowledge and skills to work in-depth in at least one of them.							
<b>9</b>	Be able to solve the problems encountered in the field of internet programming by designing web applications.	X	X	X	X	X	X	<b>5</b>
<b>10</b>	Develop and manage logistics and supply chain management activities				X	X	X	<b>3</b>
<b>11</b>	Adapt his/her theoretical knowledge and the experience he/she will gain through practice at the departments of businesses such as information technologies, R&D, and management to real life.				X	X	X	<b>3</b>
<b>12</b>	Be able to develop strategies that will provide a competitive advantage with his/her advanced knowledge of management strategies and management functions.							
<b>13</b>	Develop a business idea, commercialize the business idea, and design and manage his/her venture using entrepreneurial knowledge.							

<b>14</b>	By using English effectively, they can follow, read, write, speak and communicate universal information in the field of management information systems in a foreign language with professional competence.							
<b>Total Effect</b>								<b>36</b>

### Policies and Procedures

**Web page:** <https://www.ostimteknik.edu.tr/management-information-systems-english-1241/915>

**Exams:** The exams aim at assessing various dimensions of learning: knowledge of concepts and theories and the ability to apply this knowledge to real-world phenomena, through analyzing the situation, distinguishing problems, and suggesting solutions. The written exams can be of two types, ie. open-ended questions, which can also be in the form of problems or multiple-choice questions.

**Assignments:** Quizzes and Homework (Assignments) might be applicable. Scientific Research Ethics Rules are very important while preparing assignments. The students should be careful about citing any material used from outside sources and reference them appropriately.

**Missed exams:** Any student missing an exam needs to bring an official medical report to be able to take a make-up exam.

**Projects:** A group project with teamwork is welcome.

**Attendance:** Attendance requirements are announced at the beginning of the term. Students are usually expected to attend at least 70% of the classes during each term.

**Objections:** If the student observes a material error in his/her grade, he/she has the right to place an objection to the Faculty or the Department. The claim is examined and the student is notified about its outcome.